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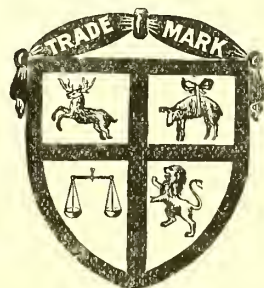
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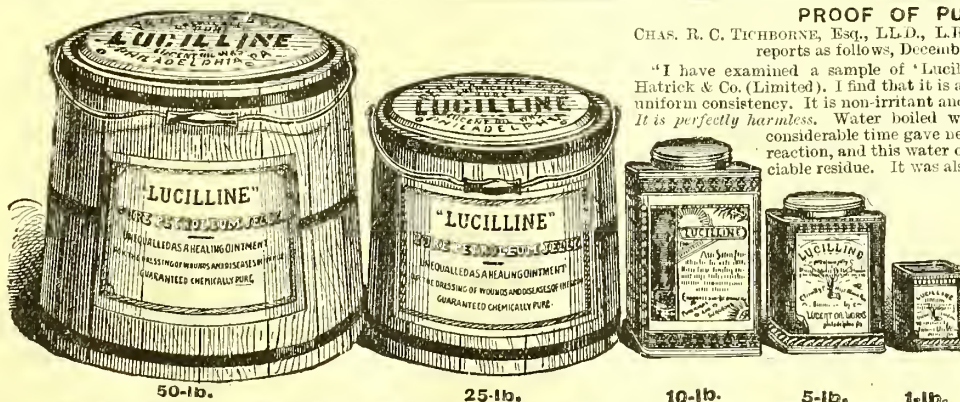
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" C. H. OSMOND, Southsea,	" G. T. WILLIAMS, Tregarth.

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Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of $\frac{1}{4}$ d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of the CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

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Literature.

Pharmaceutical Journal, bound, 1867 to 1873; Chemical News, bound, vols. 2 to 7; Journal Microscopical Society, 34 numbers, cost 5s. each; Muspratt's "Chemistry," cost 63s., 43 to 52 missing; Pharmaceutical Journal, vols. 15 to 22, unbound; any reasonable offer. McKee, Chemist, Tunstall, Staffs.

Pharmaceutical Journal and Chemical Society's Journals, practically complete from January, 1888. What offers? Cowper, Chemist, Penrith.

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The Chemist and Druggist, January 14, 1893: 6d. will be paid for first copy received by 15 15, c/o Publisher, CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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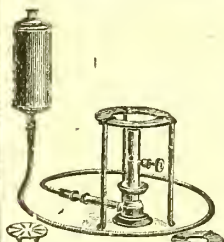
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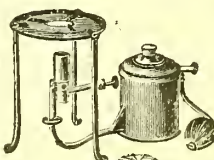
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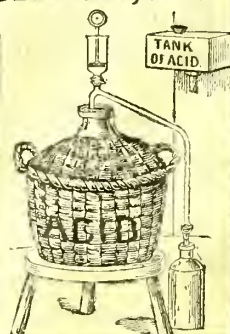
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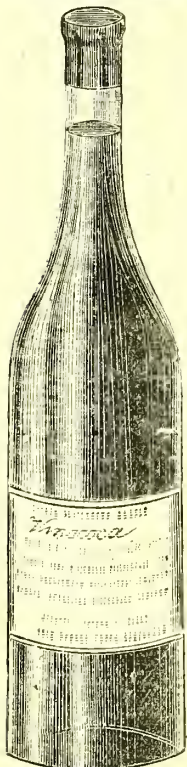
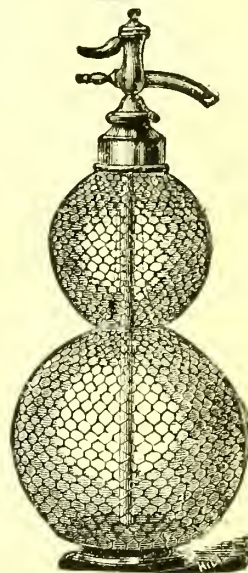
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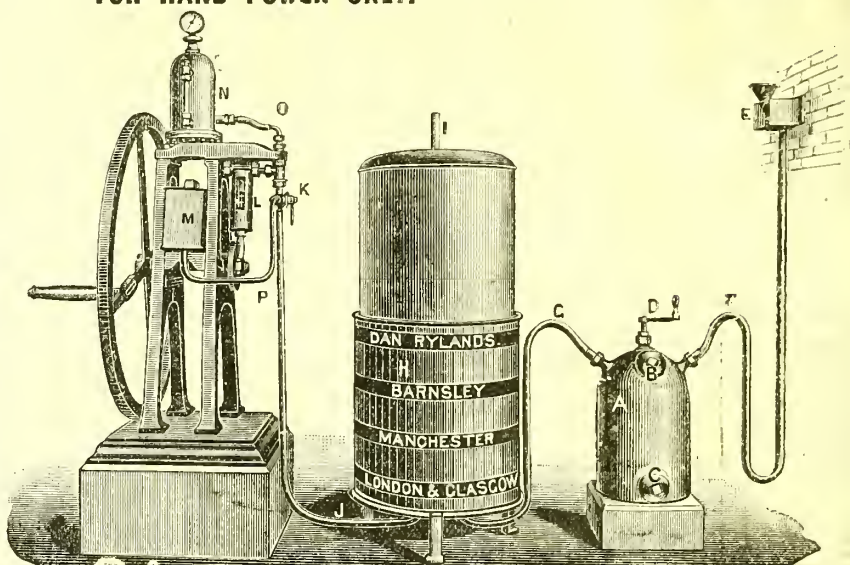
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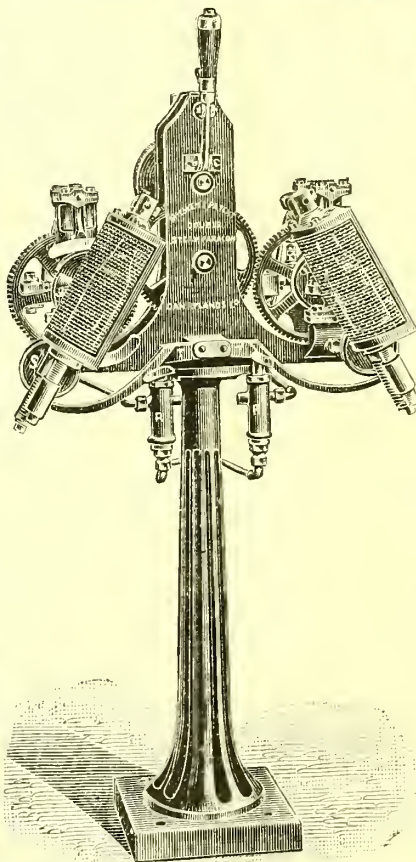
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- No. 4. **BRISTOL**, for the West of England, Midland Counties, and South Wales.

CAMWAL.—All Chemists are cordially invited to inspect any or all of the above factories, and they **SHOULD REMEMBER** that **CAMWAL IS THE ONLY COMPANY WHICH SUPPLIES NONE OTHER THAN CHEMISTS.**

CAMWAL has distributed in Dividends 10 per cent. and 10 per cent. Bonus (equivalent to 20 per cent.) in 1893, 10 per cent. in 1891 and 1892, or 40 per cent. in three years.

CHEMISTS, be loyal to yourselves, and support your own Company, the most prosperous one of the day. **2,700** have already joined hands; this number is steadily increasing, and all other Chemists should co-operate with them.

Every Chemist and every Chemist's Assistant not possessing one should secure a share. The Secretary has a few £1 Shares to transfer at 25/6 each (only one share can be transferred to each applicant).

For prices of Camwal Waters, &c., apply to Secretary, Gifford Street, London; Sun Factory, Bristol; Starbeck, Harrogate; or Raven Spring, Mitcham.

NEW ESSENCE OF LEMON.

WE are very glad that the time has once more arrived for us to address the trade on Essence of Lemon. To look back on another year's success is always most gratifying, and certainly we have every reason to express the utmost satisfaction for the success which has been attained by our ESS. OF LEMON "W.J.B. SPECIALITY."


If we consider the peculiar state of the market for Essence of Lemon during the past season, when prices reached somewhat abnormal figures, and the trade of the country (in fact of the world) being exceptionally bad, one would have expected that the weakness of human nature might have stepped in, and a certain section of the trade been induced to have risked inferior qualities under these special circumstances. But in spite of low tempting offers this has not often happened. The steady and sure progress in the sale of Ess. of Lemon "W.J.B. Speciality" since we opened our factory in Messina, in 1889, has been fully maintained, and we can now state that consumers have become thoroughly convinced as to the vast superiority of our make.

This speciality of ours has now lived down an opposition perhaps unique in the competition of modern times!!

Let the trade look around and see what has taken place since the introduction of this particular article. Some of the old "self-termed" makers, who sold what they called the "best," are now adding another quality higher in price than their "so-called" best; but having already employed the superlative for their standard article, have been driven to adopt a fancy term for their new (?) quality, in some instances using a name of a particular species of lemon, which is, needless to say, of course all **BLUFF**.

We recollect the outcry in Messina when we first opened our factory in that city. "Bush's are going to lose a lot of money! English people do not know what pure Essence is, and will never appreciate it!!" We had greater confidence in the English people, and that confidence has been fully justified. We must, however, admit that our laurels have not been gained without a severe struggle, but our cry still remains—"Buy only the really best (made by us from selected fruit), which is the most satisfactory and cheapest in use."

As regards the market for new crop we respectfully draw the attention of the trade to our market report in the December issue of our Price List.

 **WRITE FOR SAMPLE AND PRICE.**

W. J. BUSH & CO.

18 ARTILLERY LANE, LONDON.

WORKS:—MESSINA, SICILY.

ARMBRECHT COCA WINE

ITS VIRTUES.

A powerful nerve stimulant. Restores the functions of the digestive organs, strengthens the mental and physical powers, assuages thirst, relieves nervous debility. Given with benefit in cases of opium and morphia habit.

THE ORIGINAL.—The leaves which we always employ are those of **Erythroxylon Coca**, Lamarck. We select them with the greatest care, and ensure by a thoroughly sound process of manufacture that Armbrecht Coca Wine is a true representation of the valuable properties of the drug.

THE FAVOURITE.—The composition of the "medium" wine, which has by far the largest sale of the six varieties, is *our secret*. We introduced this wine, at the suggestion of Dr. Spencer Wells, as a kind of compromise between Malaga, which was generally considered too sweet, and Burgundy, which found some objectors on the score of tartness of taste.

Please use this Order Form.

To Messrs. Armbrecht, Nelson & Co., Duke Street, Grosvenor Square, London, W.

Please send immediately on the receipt of this by _____

SPECIAL PRICE FOR GROSS LOTS

		WHOLESALE.		RETAIL PRICE.		£	s.	d.
--	Doz. Coca Wine	...	36/0	Imperial Pints	...	48/0	dos.	
--	" Coca Burgundy	...	36/0	"	...	48/0	"	
--	" Coca Malaga	...	36/0	"	...	48/0	"	
--	" Coca Port	...	36/0	"	...	48/0	"	
--	" Coca Sherry	...	36/0	"	...	48/0	"	
--	" Coca Champagne	...	46/6	Quarts	...	56/0	"	
--	" " "	...	26/6	Pints	...	38/0	"	
--	" Coca Wine Extract	...	31/6	Bottles	...	42/0	"	
--	" " "	...	49/6	"	...	66/0	"	
--	" Coca Lozenges	...	18/6	Box	...	18/0	"	
--	" " "	...	22/6	Tin	...	30/0	"	

PAMPHLETS FOR DISTRIBUTION—NO CHARGE.

IF ORDER BE SENT TO US DIRECT, and REMITTANCE ENCLOSED, we offer a discount of 2½ per cent. single dozen, not less; and 5 per cent. on 3-dozen lots, Carriage Paid England and Wales, and Half Scotland and Ireland.

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For firms in India, the British Colonies, and other parts abroad are executed at a substantial discount. Please order direct (giving references), or through London agents.

SOLE MANUFACTURERS—

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Duke Street, Grosvenor Square, London.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).

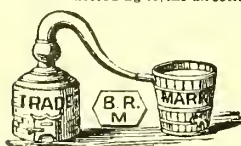
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Introduced 1855.

ROBINSON'S CONCENTRATED WATERS.

(Introduced 1855.)

One ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.



Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver., Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb.
" Anisi " 4/ "	" Cassia " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 6/ "	" Rosæ Virgin " 10/6 "
" Capi " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 1 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are excellent in quality, and will be very useful, especially in country practice." [1]

Wholesale Agents: HEARON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR.
B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

POISONING.

To Avoid Poisoning
by Impure Water use
the Mawson Filter.

The Mawson Filter Co., Newcastle-on-Tyne, and all Wholesale Houses.

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JONES & COMPANY,
COPPERFIELD ROAD,
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LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in
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REDUCTIONS TO LARGE BUYERS.
SAMPLES FREE.

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Quotations for **S.V.R. Methylated Spirit** and Finish on application.
FINEST ORANGE WINE FOR QUININE.

**JAMES
BURROUGH,**

FINE PORT (without tannin)
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FINE BURGUNDY (for invalids).
S.V.R. and Methylated Spirit at lowest present prices.

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All at Lowest Prices and
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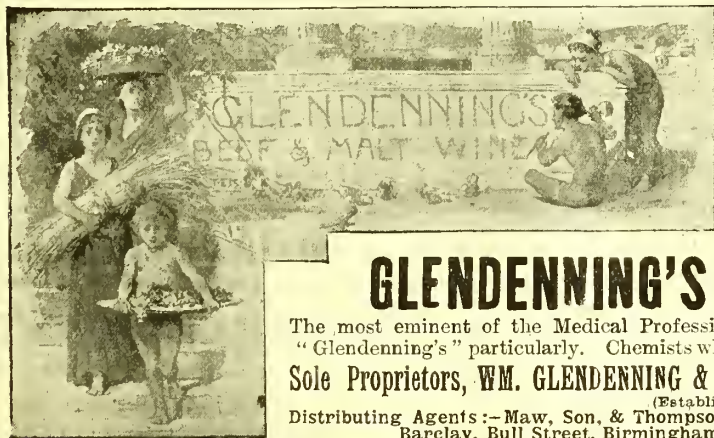
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"COCA-TONIC CHAMPAGNE"

(LAURENT-PERRIER).

The only Coca Wine prepared by actual Champagne Growers in France. Of high quality, well matured, and absolutely Sugar-free.

Of all Wholesale Houses, or direct from the Sole Consignees, HERTZ & COLLINGWOOD, 4 Sussex Place, Leadenhall Street, London.



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We use Alto Douro Port Wine, Kepler Extract of Malt and Beef Jelly, containing 53.40 Albumen.

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The most eminent of the Medical Profession constantly do us the honour of prescribing "Glendenning's" particularly. Chemists who stock our preparation find their sales increase.

Sole Proprietors, WM. GLEN DENNING & SONS, Wine Importers, Newcastle-on-Tyne

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(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.

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HIRST, BROOKE & HIRST (LIM.), LEEDS,

Manufacturing Chemists and Wholesale Druggists, Manufacturers of

ORANGE WINE

Of Finest Flavour and Quality, and specially suitable for the Preparation of Orange Quinine Wine

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From Choice Mexican Tobacco.

FROM

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CIGARS.

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WELL SEASONED.

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20/- to 32/-
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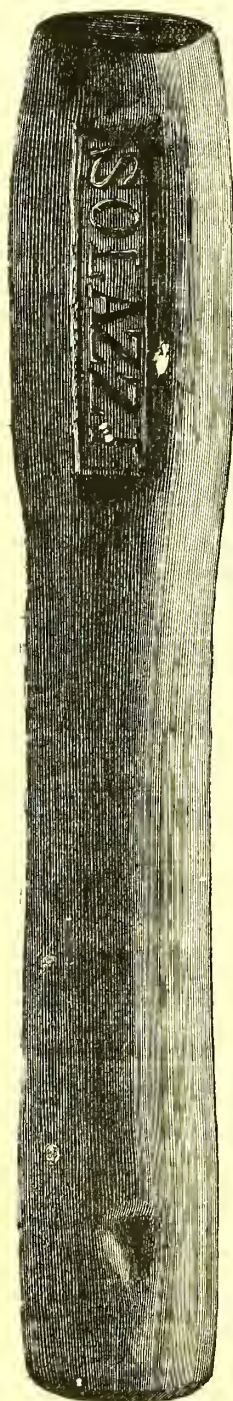
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PURE LIQUORICE JUICE.



" SOLAZZI "

is the only Liquorice Juice universally acknowledged and prescribed by the Medical Profession.

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possesses quality and flavour of a distinctive character, lacking in all inferior brands.

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is certified by Analysis to be an absolutely Pure Extract.

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Commended by the leading organ (*The Chemist and Druggist*) as "The most esteemed of all," and by *Health* (edited by Dr. ANDREW WILSON, F.R.S.E., &c.) as "By far the best and purest."

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Ask for Show Cards and Handbills.

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EIGHT PRIZE MEDALS AWARDED.

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YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., & 2s. each.

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The Best in the World. 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

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One 6d. Tin is equal to 25 Eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

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Delicious Custards without Eggs. In Boxes, 2d., 6d., & 1s. each.

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Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

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Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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For Painting Stoves, Grates, Iron, Tin, &c. 6d. & 1s. Bottles.

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Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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Make a Delicious and Nutritious Jelly. In ¼-pint, 1-pint, and Quart Boxes, 3d., 6d., and 1s. each.

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GOODALL, BACKHOUSE & CO., LEEDS.

The Chemist & Druggist

SUPPLEMENT.

Businesses Wanted
Businesses for Disposal
Premises to Let
Auction Sales

SATURDAY, DEC. 23 1893.

Partnerships
Situations Vacant
Situations Wanted
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£550.—LONDON (within 12 miles of).—Dispensing and Retail, of very good class; returns £550 yearly; good profits; well-fitted shop; convenient house and garden; held on lease; price £500.

2.—£500.—LONDON, N.—Old-established Retail and Dispensing Business; returns between £500 and £550 yearly; well-fitted shop and good house, with garden; price about £500, or reasonable offer.

3.—£650.—LONDON (City).—Good nucleus; handsomely-fitted shop; capital position for foreign pharmacy; returns between £600 and £650; valuation of stock and fixtures will be accepted, about £600.

4.—£500.—LONDON, N.E.—Very good-class Dispensing and Retail, situate in a residential locality; returns £500 yearly; all profitable business; very good well-appointed house with garden; rent very moderate; price about £500.

5.—£1,000.—LONDON (Suburban Northern District).—Business, almost unopposed; returns £1,000, increasing; well-fitted shop and good stock; good house, situate at a corner; price £900.

6.—£600.—LONDON, W.—First-rate locality for business; situate in a main thoroughfare; returns £600; full prices; capital house, well-appointed and roomy; price £600.

7.—£300.—LONDON, SUBURB, S.—Prescribing and Retail; very profitable; returns £5 to £6 per week; all profitable work; can easily be extended; house can be let off if wished, reducing the rental to almost nominal sum; price £150.

8.—£750.—SOUTH COAST.—Watering-place; Dispensing and Retail, all good-class trade; returns £700 to £750; first-rate position; neatly-fitted attractive shop, with excellent stock; good opportunity for a well-qualified man; about £800 required.

9.—£1,200.—WILTS.—Mixed Agricultural Business; no heavy business; several good proprietary articles in repute with farmers; returns £1,200 yearly; very good shop, house, &c.; price required £700.

10.—£1,500.—NORFOLK.—Situate in a splendid Agricultural centre; old-established very good-class Business; returns £1,500 yearly; large premises, very convenient; vendor relinquishing for health sake; about £1,200 required; valuation if wished.

11.—£300.—SUFFOLK.—Seaside; small Business under management; present returns £300, can be easily increased; good corner position; 6-roomed house and shop; low rental; good opportunity for a young man prepared with about £150.

12.—£800.—SOUTHERN COUNTY.—Retail and Dispensing, and some stationery; situate in a good market town; returns £800 yearly; price about £500, part may remain.

13.—£500.—MIDLAND.—Manufacturing town; Retail and Dispensing Business; situate in a good position in a business locality; returns £500 yearly; well-fitted shop and good house, with garden; price £350.

14.—£1,000.—EASTERN COUNTY.—Very flourishing town; handsome shop and good stock; returns £1,000 yearly; commodious house and good business premises; valuation if wished; about £900 to £1,000 required.

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ALKALOID FACTORY FOR SALE.

I desire TO SELL, either as a whole or in Lots, the COMPLETE PLANT and APPURTENANCES of my

ALKALOID FACTORY,

CONSISTING OF

REDUCING, EXTRACTING, AND DISTILLING APPARATUS, PRESSES, &c.

The Factory has only recently stopped working, and the Plant is in working order and mostly new.

The Works may be inspected & Estimates had upon application.

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CHEMISCHE FABRIK,

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WANTED, a high-class Retail and Dispensing Business, in London, superior part, returning £1,200 to £1,500, with residence. Reply, with full particulars, to E., c/o Messrs. Meggeson & Co., 14 Miles Lane, E.C.

WANTED, Mixed Country Business; good house; about £500, or certain partnership, with view to succession; North preferred; no agents. "Exit," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

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References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

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F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FIXTURES BOUGHT FOR CASH**CHESHIRE.**—£1,100 returns.—Good medium-class trade; net profit nearly £350; price £800, or valuation.**LANCS.**—£1,050 returns.—Retail, Dispensing, and Prescribing; price £650, or valuation.**WORCESTERSHIRE.**—Old-established Light Retail; returns about £400, capable of much increase**GLOUCESTERSHIRE.**—£300 returns, very profitable; price about £200.**WILTS.**—£1,200 returns.—Good General Country Retail; rent £30; price £700.

BERDOE & CO.

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30 JEWRY STREET, ALDGATE, E.C.
Established 1870.**

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Having been for the past 22 years solely engaged in the Sale, Purchase, and Valuation of Chemists' Businesses, we have, as Transfer Agents and Valuers, the largest experience of any in the Trade. VENDORS placing their business in our hands for transfer may in all cases rely upon a speedy sale being effected without undue publicity. Terms forwarded post free on application. No sale, no charge.

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4.—**SOUTH COAST.**—Fashionable resort; light Retail and Dispensing Business; returns £660; net profit £520; same hands 15 years; satisfactory reasons for selling; good house, garden; price £650.

5.—**SOUTH COAST.**—Fashionable resort; good-class Retail, Dispensing and Prescribing Business; returns £500, good prices; low rent; convenient house; price only £300; worth attention.

6.—**LONDON, W.**—Good thoroughfare; Retail Dispensing and Prescribing Business; returns about £1,300; elegantly-fitted shop, all modern improvements, heavily stocked; 10-roomed house; price £850.

7.—**LONDON EAST.**—Main road; Family Retail and Prescribing Business; returns £800; net profit over £350; good house, handsomely-fitted shop, well stocked; price £600 or offer.

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84

CROCKER & CO.

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NO CHARGE IS MADE UNLESS A SALE IS EFFECTED.

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MIDLANDS.—Old-established Retail and Dispensing trade; in same hands many years; for sale through death of proprietor; returns £1,500; price £1,000.

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BIRMINGHAM.—Light Dispensing and Family Business, established 40 years; well fitted; returning £375; rent £55; price valuation.

LONDON, N.E.—Old-established Family and Dispensing Business with very handsome pharmacy; returns nearly £600; rent £60; price £500.

LONDON (Northern Suburb).—Old-established Family trade, returning £700; very profitable; price £600, or offer; owner retiring.

CHESHIRE.—An old-established Retail and Dispensing Business, returning £1,030; price £800, or valuation; strongly recommended to a pushing man.

SEASIDE (Fashionable Health Resort).—First-class Retail and Dispensing Business; returns £1,245; rapidly increasing; satisfactory reasons for selling; price £1,200, or valuation terms can be arranged; 10-roomed house and handsome pharmacy.

KENT.—Near London; a neglected Cash Retail and Prescribing trade; returns £7 weekly; formerly did £16; ill-health cause of sale; price £250.

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LONDON, S.E.—Retail and Family Business, returning £400 a year; with good house in best position of district; price £350; a bargain.

NO CHARGE TO PURCHASERS.

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Please state requirements and capital, when candid opinions as to adaptability will be given without charge.

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AN exceptional opportunity of acquiring a genuine Business, in main thoroughfare; doing close on £500, at good profits; £250 asked; trial allowed; good reason for disposal. 179/33, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SCOTLAND (West), in large city; middle-class Business, established many years; well-fitted double shop; returns nearly £500, capable of increase; price £300, or valuation. Address, "Recipe," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£300 or valuation.—Old-established Mixed Business, in good market town in Lincolnshire; in present proprietor's hands 26 years; shop, with plate-glass front, and 7-roomed house; rent £20. Apply, W., Emery House, Boston, Lincolnshire.

BUSINESSES FOR DISPOSAL—Cont.

HANDSOME opportunity for an energetic business man: Chemist's Shop, well fitted and stocked, on main road at Mortlake, for immediate disposal; all at valuation. Apply to G. Curtis, 4 Beach Croft Road, Mortlake, S.W.

BOURNEMOUTH (Death vacancy).—Light Retail and Dispensing Business; returns £475 under management; corner shop, good position; price £325, 182/4. Office of **THE CHEMIST AND DRUGGIST** 42 Cannon Street, E.C.

TO CHEMISTS.—By order of Exors.—Goodwill of an old-established Business in a thickly populated neighbourhood; premium £250, including trade fixtures and stock. Mr. Brinsley, Auctioneer, 30 New Bridge Street, London, E.C.

LONDON.—Immediate, the Stock and very handsome Fittings of Chemist's Shop to be sold by private tender; useful workable stock, &c.; suit anyone commencing good-class business. Address, "Instantur," Office of **THE CHEMIST AND DRUGGIST**, Cannon Street, E.C.

IMMEDIATE.—Good-class Mixed Business, near Southport; convenient house and shop; rent and taxes low; satisfactory reasons for disposal; an excellent chance for young man with limited capital. Address, A. B., John Thompson (Limited), Wholesale Agents, Liverpool.

MANCHESTER.—For immediate Sale, the Goodwill, Stock-in-Trade, and Fixtures of an old and well-known Chemist and Druggist Business, doing a fair return, in one of the leading thoroughfares; price £450; rent of shop £75. Full particulars, William Hall, Auctioneer, 22 Booth Street, Manchester.

PENZANCE.—Good Business, situate in centre of town; 3 market days; good house, shop well fitted; takings about £550; to be sold a bargain; the finest opportunity ever offered; good reasons for sale; premises newly decorated; price £300. "Verum," *Pharmaceutical Journal* Office, 5 Serle Street, London.

GOOD news for Store-sick Chemists; £400 a year realised by purchasing country Drug Business far from madding Stores; returns £1,300, increasing; good prices obtained; feeble opposition; rent £30; only cash buyers need apply; price £750. 180/6, Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon Street, E.C.

SITUATIONS OPEN.

3s. 6d. for 50 words; 6d. for every 10 words beyond.

A WELSH-SPEAKING Assistant wanted at Morgan W. James', Chemist, Llaethly, S. Wales. State terms, &c.

WANTED, Junior Assistant; send photo; state salary (outdoors). Cook, Chemist, Hindley, Lancashire.

JUNIOR, studying for Minor, or just passed; good-class Dispensing and General. Kemp, 10 Bedford Terrace, Kensington.

FOR January 1st, an energetic and obliging Assistant, for Cash business; about 23 years. F., 378 Coldharbour Lane, Brixton, S.W.

AN Assistant as Junior. Apply personally (if by letter send all particulars, to J. G. Shirley & Son, 2 Westbourne Grove, Bayswater, W.

WANTED, a man well up in Pearl Pill-coating; state experience and salary required. Address, F. Brown, Chemist, Park Street, Lincoln.

WANTED, a Junior Assistant, accustomed to a good-class Dispensing business; state salary (indoors), D. Harries, 100 Queen Street, Cardiff.

WANTED, a gentlemanly Assistant, qualified, for first-class Dispensing business. Apply, E. c/o R. Sumner & Co., 50A Lord Street, Liverpool.

JUNIOR or Improver (outdoors), accustomed to General Retail; reliable and energetic, with good reference. Full particulars to S. C. Holford, Stratford, E.

EARLY in January, a qualified Assistant about 22 years of age. Apply, giving full particulars and enclosing photo, to Wilcox & Co., 239 Oxford Street, London, W.

AN energetic Junior Assistant; indoors; one who has been accustomed to a Mixed trade with Wholesale. Apply, stating salary and references, to N., Post Office, Ilkeston.

JUNIOR or Improver (outdoors), for Drug-store; short hours; no Sunday duties. Full particulars to 179/26, Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon Street, E.C.

ASSISTANT, qualified, for business of H. Thomas & Co., 14 South Colonnade, St. Leonards-on-Sea; 2 assistants employed. Write, H. J. Deacon, Warrenhurst, Bromley Park, Kent.

JANUARY 1st, Junior Assistant, indoors; personal application preferred, or if by letter full particulars, with photo, will oblige. J. Skewes, Chemist, 2 Upper Street, Islington. Near the Angel.

JUNIOR Assistant, about 22; well up in Dispensing and good writer (help out, bedroom found). Enclose photo and full particulars to Davies, Chemist, 8 Union Terrace, Notting Hill, London.

JUNIOR (indoors); aged about 20; one accustomed to Country Wholesale preferred, but not essential. Apply, stating age, height, references and photo (to be returned), to Fred J. Oliver, Maidstone.

WANTED, young man to take charge of the sale of Disinfectants; only those who have some knowledge of the business need apply. Address, 191/41, Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon St., E.C.

QUALIFIED Assistant required at once; good Dispenser and Counterman essential. Apply, stating age, height, references, and salary required, with photo, to Holman, Ham & Co., 74 High Street, Exeter.

WANTED, on January 1, an active outdoors Junior Assistant; one requiring permanency preferred. Apply, enclosing photo, stating age, height, experience, and salary required, to David Evans, 140 Clapetow Road, Newport, Mon.

WANTED, in January, a qualified Assistant, about 23, for Mixed Country business in the North; good Dispenser and gentlemanly address; short hours. B. A., Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon Street, E.C.

ASSISTANT; Minor; hours average 8 to 8; on duty one Sunday in three; high class Mixed business. Apply, with photo if possible, reference, &c., to Cowper, Chemist, Penrith. Applications not answered in 3 days respectfully declined.

IMMEDIATELY, Junior or Improver; abstainer preferred; time for study, short hours, hour in afternoon for recreation; Mixed country business; first-class references required. State experience, salary required, &c., C. Gerring, Witney, Oxfordshire.

WANTED qualified Assistant, one accustomed to good-class Dispensing business; one who has lived in a large town preferred; salary (indoors) £60. Address, stating usual particulars to "Spec," c/o Sanger & Sons, Winsley Street, Oxford Street, London.

IMMEDIATELY.—An Assistant, about 23 years of age (with Minor qualification preferred), must be a neat and accurate Dispenser, and well accustomed to Light Retail. Apply, with full particulars, including salary, and last two references, to E. Silk, Teignmouth, South Devon.

JUNIOR or Improver in Light Retail business; soon after Christmas; hours 8 to 8, Saturdays 10; comfortable home; must be good Dispenser and obliging to customers. Send particulars, photo, salary required, and whether abstainer or not, to Cory, Chemist, Newport, Isle of Wight.

ASSISTANT wanted for Mixed business; 8 miles from Manchester; must be thoroughly trustworthy, quick, and obliging, with or without Stores experience; interest in business could be arranged for suitable man. 179/16, Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon St., E.C.

ASSISTANT in good-class Dispensing business; able to Dispense accurately and expeditiously; good references indispensable; abstainer preferred. Apply, with full particulars and photo (to be returned), Burroughs & Co., Dispensing Chemists, Christchurch Road, Oxtou, Birkenhead.

QUALIFIED Assistant wanted to manage Branch in provincial town, where pushing business in heavy drugs, dysenteries, horse and cattle medicines, and paints (no paraffin) will be carried on. State salary (outdoors) and experience, to 12/19, Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon Street, E.C.

JUNIOR or Improver, wanting time for study; board in house, bedroom provided outdoors; help given in reading, and time arranged for attending lectures; must have good references. Oblige with full particulars as to salary and time required, "Salol," c/o Mrs. Porter, Lily Terrace, Station Road, Chiswick.

WANTED, soon after Xmas, Assistant for a good-class country business, to travel about two days a week; no Sunday duty; sleep out; three kept; good references required. Apply, stating age, height, and salary required, enclose carte (to be returned), H. S. Martin, Chemist and Mineral Water Manufacturer, East Grinstead, Sussex.

MANAGER; qualified; indoors; gentlemanly appearance and address; must be a good Dispenser, Prescriber, and Tooth-extractor; one used to a good-class Mixed trade and an abstainer preferred; good references indispensable; send photo (to be returned). Apply, stating age, height, and experience to "Manager," 1/1 North Street, Leeds.

SYDNEY, N.S.W., AUSTRALIA.—Chemists' Assistants coming out to Sydney are requested to call on Pattinson & Co., 144 Oxford Street, as they have frequently vacancies for qualified Assistants; liberal salaries given to energetic men, who are used to a quick counter trade in cutting business; Pattinson's four shops comprise the largest retail business in Australia.

WANTED, for the Worcester Amalgamated Friendly Societies' Medical Association, a qualified Dispenser; salary, £80 per annum; the gentleman appointed must devote the whole of his time to the duties of the office. Apply, by letter, stating age, experience, whether married (with not more than four testimonials), by December 28, to Mr. G. B. Gibson, Easy Row, Worcester.

STORES TRADE.—Wanted qualified Assistant who has had thorough practical experience in Drug-stores; must be good all-round man. Applications from Chemists not previously employed in capacity named useless. State age, salary (outdoors), and reference, to T. H. W., Office of **THE CHEMIST AND DRUGGIST**, 42 Cannon Street, E.C.

GENTLEMANLY Assistant wanted at once (indoors), in first-class Dispensing business at seaside; not under 23; must be quick at Dispensing, &c., and have had good experience; short hours and comfortable berth. Send particulars of experience, age, height (enclose photo, &c., to be returned), to Keeble, Marine House, Clevedon, Somersetshire.

CAPE COLONY.—Assistant wanted, immediately; single; must be a good Dispenser, and preference given to one accustomed to Country trade; Minor qualification; aged about 25; salary, first year, £140; second, £150; third, £160; sleeping accommodation provided; second-class passage, paid out; candidates must hold first-class references. Apply to "Cape" Messrs. Evans, Lecher & Webb, 60 Bartholomew Close, London.

SITUATIONS OPEN—Cont.

WANTED, a Senior Assistant, for South of Ireland. Apply, C. R. Harker, Stagg & Morgan, 15 Laurence Pountney Lane, E.C.

WANTED, a Junior Assistant, good writer, one able to keep books, in a Dispensing business; letters not answered in 3 days declined. Apply to A. H. Adams, 21 Formosa Street, Maida Vale, London, W.

AT once; Junior; good address and Counterman, for Mixed Retail; good stock putter-up; one only kept; outdoors. Salary and full particulars, photo (to be returned), Longdin, Chemist, Scarborough.

TRAVELLER, with good connection in town, wanted; good salary; commission. Applications, by letter, with full particulars, to 182/3, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C. Also Travellers for country.

WANTED, commencement of the year, a gentlemanly Assistant of good address; qualified; London experience; well up in Dispensing; age about 25; indoors. Apply, with photo, to W. R. Howard, 4 Napier Road, Kensington, W.

WANTED, an indoor qualified Assistant, aged about 25, for good-class Country business; must be able to Prescribe, and also have a knowledge of Cattle-medicines; hours short; no Sunday duty; salary £60 per annum; state full particulars and reference in first letter; replies not answered in 4 days are declined. G. H. Morgan, Wem, Shropshire.

M. R. PHILLIPS, Pharmacist, Ealing, W., requires a Junior Minor Assistant (outdoors); one accustomed to a good-class Dispensing business, and having preferably some knowledge of Homoeopathy and Photography; personal application desirable, but applicants by letter should state age, height, experience, terms, references, and enclose carte.

WANTED, in Manchester district, qualified Assistant, about 25, for quick Retail trade; must be active and obliging, and of good address; one used to Store trade preferred; salary 40s. per week and commission; no Sunday duty. Apply, stating age, experience, and full references, 165/14, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Tutor for Bell's Scholarships; London North. Payne, 350 High Street, Chatham.

SITUATIONS WANTED.

WHOLESALE; Wet or Dry; unqualified. E. S., 23 Asylum Road, S.E.

PART or whole time; 22; first-class references. A. P., 6 Ardene Road, Brixton Hill.

ASSISTANT; 7 years' experience, 2 West-end. Evans, 50 Duncannon Terrace, Islington.

OUTDOOR Assistant or Branch Manager; aged 31; Askew, 2 Cliff Street, Helden Bridge.

AS Junior Assistant; aged 22; good references. J. F. Wild, 193 Great Norbury Street, Hyde.

JUNIOR; 20; steady, obliging; 4½ years' references; January. H. N., 42 Prospect Hill, Redditch.

HALL qualification; aged 32; abstainer; state salary. Arstall, 3 Rutland Street, Puddlebury.

LOCUM-TENENS; qualified (Major); 48; Prescriber. J. B., Kenninghall Road, Clapton, N.E.

MANAGER; qualified; 31; disengaged; married. "Chemist," 163 Haydon's Road, South Wimbledon.

DISPENSER, Surgeon's; London experience; aged 26; disengaged. "Statim," 15 Nettleton Road, Gloucester.

PART-TIME Assistant; in or outdoors; aged 23; West-end experience. M., 53 Great Marylebone Street, W.

PART-TIME; S.W. district preferred; Apothecaries' Hall qualification. A. Lilly, 13 Church Street, Camberwell.

JUNIOR; 21; 5 years' experience in Dispensing and Retail; disengaged. "Exalgin," 47 Grey Friars Lane, Coventry.

PART-TIME; Assistant; 24; London experience. "Student," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PART-TIME with Surgeon in return for board and lodgings; 5 years' experience; 22; "Student," 70 Cambridge Street, Victoria, S.W.

UNQUALIFIED; 25; 10 years' experience; fluent French; whole or part time; outdoors preferred. "Mac," 36 Angell Road, Brixton.

LOCUM-TENENS.—Wanted, by advertiser, with good experience, in view of succession or partnership. Horsey, 103 Thorpe Road, Norwich.

AS Branch Manager or Locum; disengaged; aged 35; qualified; married. "Minor," 28 Boundary Road, St. John's Wood, London, N.W.

JUNIOR (North preferred); aged 20; 6 years' experience; medium height; outdoors preferred. "Menthol," 15 George Street, Driffeld, Yorks.

JUNIOR or Dispenser; 21; abstainer; 6 years' experience; London and outdoors preferred. Neave, e/o Peacock & Co., Chemists, Bristol.

M. R. DOUBLEDAY, Dorking, has pleasure in recommending as Junior his late Apprentice; vacancy for an Apprentice in good business.

ASSISTANT, or Junior; 21; 6 years' experience; Welshman; good references; disengaged in a month; Cardiff or Pontypridd neighbourhood preferred. Williams, 102 Brithwenydd Road, Trellaw, Pontypridd.

LOCUM-TENENS; 37; qualified; abstainer; disengaged. "Minor," 8 Castle Street East, W.

ASSISTANT or Branch Manager; qualified; 24; references. H., 1 Clipstone Avenue, Nottingham.

WHOLESALE; Wet Counter; aged 36; 16 years' experience. "Wet," 29 Westmoreland Street, Piccadilly.

DISPENSER-BOOKKEEPER; thoroughly experienced; full Hospital Curriculum. "Alpha," 55 British Street, Bow.

ASSISTANT; aged 32; general experience; good references; height 5 ft. 10 in.; married; outdoors. "Devon," 3 Belmont Road, Hay, Hereford.

MANAGER or Assistant; qualified; married; aged 40; thoroughly experienced; disengaged. Y. Z., 55 Middlegate Street, Great Yarmouth.

MANAGER of Branch; London preferred; married, no family; highest references. 20/93, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BRANCH Manager, registered; aged 39; married; good Prescriber, Extractor; could work up new business; used to pushing; first-class references. "Chemist," Wyleys (Limited), Coventry.

FRANCE.—Situation in English, or first-class French Pharmacy in Paris is required by an English pharmacist, with a fair knowledge of French. "Linstead," 1 Victoria Road South, Southsea.

QUALIFIED Chemist seeks engagement after Christmas as Dispenser or Senior; aged 28; height 5 ft. 11 in.; married; 4 years in business himself. "Chemist," 62 Franklin Street, Scarborough.

MANAGER, permanency, by a retired Chemist, aged 46; good all-round experience, Prescriber and Extractor; quick cash trade preferred. "Model," Rosewood, Woolstock Road, Mosley.

DISPENSER, in London, to Hospital, Dispensary, or Surgeon; very great experience; undeniable references as to character and ability; at liberty now. Address, "Index," 53 Leymond Place, W.

EVENING Employment.—Advertiser seeks situation (near Muter's preferred), to occupy time available after lectures; personal application to settle terms. "Assistant," 83 Brompton Road, S.W.

A YOUNG Pharmacist with best references, who has been engaged for some years in Berlin, desires a situation in foreign parts. Address 176/18, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GENTLEMAN (experienced), who has successfully introduced Specialities to Medical men, Chemists, &c. is open for engagement; unexceptionable references. "Medico," 7 Brook Road, Watton, Liverpool.

MISCELLANEOUS.

WANTED, to buy, Selenium, and Selenium containing materials. Address, M. B. 5398, Haasenstein & Vogler (Otto Maass), Vienna.

FOR SALE.—The best American formula for the speedy and positive cure of the Tobacco Habit; a certain antidote for all forms of this filthy and injurious practice; has a large sale in America, and is a fortune to an enterprising man. Working formula and full particulars sent for £1 ls. by Dr. Druitt, Box J., Hayward, California. The exclusive rights for Great Britain can be had on moderate terms.

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A PRACTICAL Soapmaker and Perfumer, until recently managing director of a factory in Paris, thoroughly conversant with the manufacture of soaps and perfumery of all kinds, seeks a similar appointment in Great Britain or abroad; the turnover of the firm (now expired) with whom he was last engaged was about one million francs a year. Address, A. C., 1863, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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Illustrating the structure of Stems, Roots, Leaves, the cellular arrangement Exogenous, Endogenous, and Aerenchymatous Plants, Nuclei of Cells, Structure of Petals, Anthers, Pollen Grains and Ovary, Stomata, Cystoliths, Raphides, Annular Rings, Spiral, Pitted, Scalariform and Laticiferous Vessels; price complete, in portfolio case, 12s.

Set of 12 of the more important starches, mounted in fluid to exhibit hilum, concentric rings, &c., 10s. 6d. in case.

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Also of many Non-official Drugs in common use.

BY GEORGE STIRLING.

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A chef d'œuvre of the perfumer's art.

UNDER ROYAL PATRONAGE.

Dedicated by gracious permission to PRINCESS MAY (H.R.H. The Duchess of York).

N.B.—This entrancing Perfume is quite new, and possesses the rare quality of preserving
its very distinctive and floral character throughout.

In attractive single cases, 21/-, 40/-, and 80/- per doz Sold by all leading Chemists and Perfumers.

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GENUINE EAU DE COLOGNE

Johann Maria Farina

Gegenüber dem Laurenz Platz

} 2-oz., 7/6, 4-oz., 14/; 1-pints, 21/-, pints, 42/-; quarts, 84/- per doz.

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PHENACETINE-BAYER.—The safe and effective Antipyretic and Antineuralgic.

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Full List of their Pharmaceutical Products may be had upon application.

Sole Agents—BRYCE & RUMPF, -

20 Booth Street, MANCHESTER; 141 West George Street, GLASGOW; 15 Fish Street Hill, LONDON; 48 Vicar Lane, BRADFORD.

RICKSECKER'S PERFUMES

At the WORLD'S FAIR.

An Extract from the Special Report of "THE CHEMIST AND DRUGGIST," July 29, 1893.

PERFUMES form one of the most attractive features in the ground-floor section. A prominent and most artistic exhibit is that of THEO. RICKSECKER, of Maiden Lane, New York, which occupies a corner of the aisle as we approach from the north entrance. Here there is a series of eight cases decorated in green enamel and gold, forming a kind of wedge.

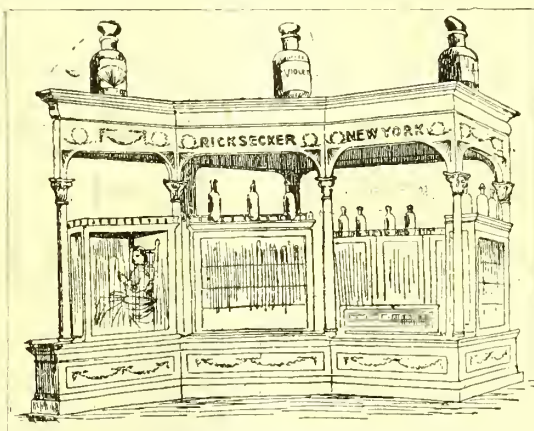
The apical case contains a figure of the woman most revered by all Americans—Martha Washington, the mother of the Republic. This figure is modelled in wax, and is, we believe, a true likeness. Martha Washington was a charming and lovely woman, and Mr. Ricksecker has not failed to do her beauty justice, for the dressing of the figure is as tasteful and elegant a costume as would serve for a royal wedding. This unique feature naturally attracts attention to the exhibit, and once the visitor begins to inspect it he finds many things to interest him.

There is a charm about the Ricksecker perfumes which is unusual: they are elegantly put up, both the shapes of bottles and the style of labels being quite *sui generis*. This is particularly noticeable in such perfumes as lavender-Cologne, sweet clover, and many others which might be named. The perfumes are displayed in magnificent vases and flasks as well as in the usual bottles for retailing, and they are set off by a selection of solid perfumes (sachets, &c.), which are also of elegant get-up.

In connection with these perfumes we may mention that the syndicate having the exclusive sale of per-

fumery at the Fair selected them as the only kind to be sold there, and the company which purchased the concession for selling perfumery through machines use them only in the 200 machines on the World's Fair grounds.

Besides perfumes the exhibit contains a good selection of toilet-preparations, such as tooth-powders, face-powders, reviving-salts, and soaps. There is a 165-lb. block of Ricksecker skin-soap on show which looks just like marble, and which, we noticed, was always dry whatever the state of the weather might be. This is a distinct innovation in toilet-soaps, for it eschews all the characteristics which are generally taken to imply attractiveness. For instance, it is not brightly coloured, nor is it scented—the oleaceous base is purely vegetable and in saponification the amount of alkali is rigidly hit off, and by subsequent treatment the soap is brought to a condition of strict neutrality. In appearance the soap looks well, for it



is milled five times, so that it comes out almost cream in colour, and the odour is not unpleasant. It gives a smooth but not abundant lather which can lie upon the skin for a long time without producing irritation, and its detergent qualities are excellent.

It will be noticed from the sketch that Mr. Ricksecker's exhibit is surmounted by three gigantic bottles of perfume, and we ought to add that the cases are so arranged as to form an office within which the attendant can receive visitors, who also have the privilege of writing letters in the office.

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PURITY GUARANTEED.

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OTTO OF ROSE (Pure Virgin).

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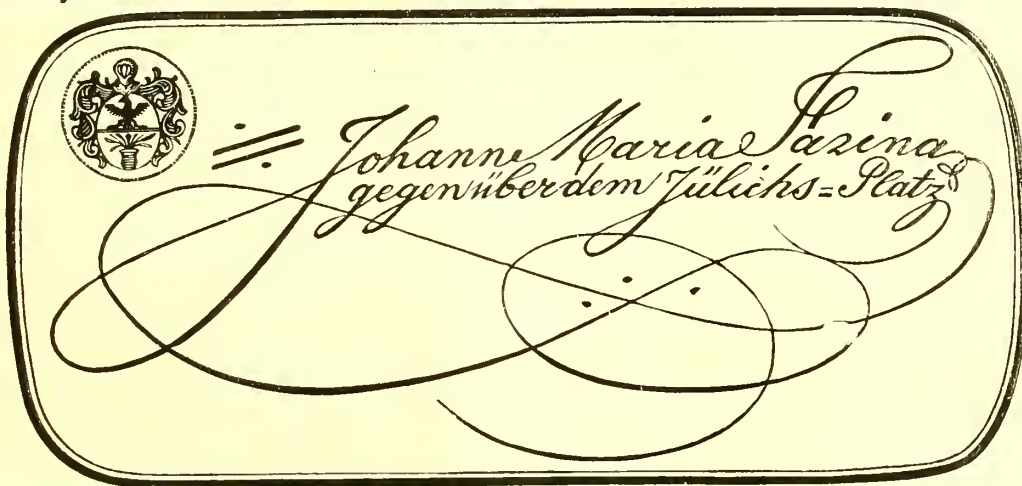
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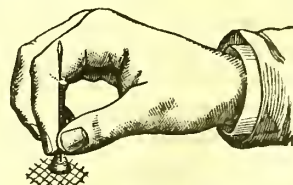
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Macfarlan, J. F., & Co.
Smith, Bertie, & Co.
Smith, T. H., & Co.

OILS, PAINTS, VARNISHES, &c.
Anglo-American Varnish Co.
Brown, J. H., & Co.
Fox, W., & Sons
Finch, John, Son & Co.

OINTMENT BASES
Burgess, E., Jun.
Burroughs, Wellcome & Co.
(Lanoline)
Chesebrough Co. (Vaseline)
Christy, T., & Co.
Lanoline
Lloyd, T. Howard, & Co.
Richardson, J., & Co. (Leicester), Lim. (Anaspaline)

OPIMUM
Bertie-Smith & Co.
Hopf, R.

OPTICIANS
Bokwright & Grey
Darton, F., & Co.

OTTO OF ROSE
Fuerst Bros.
Warrick Bros.

OXIDE OF ZINC
Hibbuck, T., & Son, Lim.

PAPAPA (Dr. Finkler)
Kuhn, B.

PAT. MEDICNS, &c.
Anglo-Am. Drug Co., Lim.
Atkinson & Barker (Infant Preserv.)
Barclay & Sons, Lim.
Beecham, T. (Pills)
Bow, Dr., Liniment
Bromley, C. (Gout and Rheum.)
Chemists' Association, Lim.
Clarke's Blood Mixture
Congreve, G. F.
Edwards & Son
Evans, Lescher & Webb
Fassett & Johnson
Fenning (Powders)
Goodall, Backhouse & Co.
Holloway (Pills and Oint.)
Hovenden & Sons
Lalor (Phosphodyne, &c.)
Mackenzie, Dr. (Oatarrh Cure)
May, Roberts & Co.
Newbery, F., & Sons
Pepper, John, & Co. (Lim.)
Popular Remedies Mfg. Co.
Roberts & Co. (Foreign)
Rooke, Dr., 'im.
Southall Bros. & Barclay
Sutton, W., & Co.
Wilson, A. (Bunter's Nerveine)
Young, J.

PEPSIN, &c.
Armour & Co.
Burroughs, Wellcome & Co.
Chassaign & Co.
Fletcher, Fletcher & Stevenson
Kuhn, B. | Lorimer & Co.
Newbery, F., & Sons (Inglivin)
Stern, G. & G.
Warner & Co. (Inglivin)

PEPPERMINT OIL

Bush, W. J., & Co.
Stevenson & Howell

PERFUMERY, FANCY SOAPS
Barclay & Sons, Lim.
Bleasdale & Co.
Biondeau & Cie. | Boehm, J.
Blyton, Astley & Co.
Breidenbach & Co.
Brooks, T. (Solid Perfume)
Brummesteidt & Liders
Burroughs, Wellcome & Co.
Chemists' Association, Lim.
Chesebrough Co.
Crown Perfumery Co.
Evans, Sons & Co.
Ewen, J., & Sons
Farina, J. M.
Greenall & Son
Hovenden & Sons
Lancaster & Co. | Mulhens, F.
Newbery, F., & Sons (Sardos)
Pears, A. F., Lim.
Potter & Clarke
Price's Patent Candle Co.
Rickesacker, Theo.
Sandoid & Co.
Sozio & Andrioli
Tidman & Son | Treatt, R. C.
Truefitt, H. P., Lim.
Warrick Brothers
West, T. (Ozell's Monia)
Woolley, Sons & Co. (Powder)
Wright, Layman & Umney

PEROX. OF HYDR.
Burton, W., & Sons
May & Baker, Lim.
Robbins & Co.

PETROLEUM
Allen & Hanburys
Barclay & Sons, Lim.
Cones & Co. (Lim.)
Fuerst Bros. (Kally)
Hattick & Co., Lim. (Lucilline)
Snowdon, Sons & Co.

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Allen & Hanburys
Armour & Co.
Bass Bros.
Barron, Harveys & Co.
Becher, J. D. | Boehm, Fredk.
Boehringer, C. F., & Sons
Boulton, J., & Co., Lim.
Bryce & Kumpf
Burgoyne, Burdidge & Co.
Burroughs, Wellcome & Co.
Chassaign & Co.
Duncan, Flockhart & Co.
Farris & Co.
Fletcher, Fletcher & Co.
Giles, Schlacht & Co.
Hearon, Squire & Francis
Hewlett & Son
Howards & Sons
Jeyes' Sanitary Compounds Co.
Lambert Pharmaceutical Co.
May & Baker, Lim.
Moss, J., & Co.
Potter & Clark
Richardson, John, & Co. (Leicester), Lim.
Smith, T. H., & Co.
Southall Bros. & Barclay
Sutton, W., & Co.
Symee & Co.
Tyrer, T., & Co.
White, Alfred, & Sons
Woolley, Sons & Co.
Wride Bros.
Wyeth, Jno., & Bro.
Zimmermann, A. & M

PHOTOGRAPHIC
Barclay & Sons, Lim.
Blackfriars Photographic Co.
Boehm, Fredk.
Botwright & Grey
Burroughs, Wellcome & Co.
Darton, F., & Co.
Fuerst Bros.
Howards & Sons (Chemicals)
Kent, G. B., & Sons
Tyrer, T. Co.
White, Alfred, & Sons
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Pindar, J. W.
Tookood, W. (Coater)
Werner & Pfeiderer

PILLS (Coated, &c.)
Allen & Hanburys
Anderson Apothecaries' Hall
Beecham, Thomas
Blyton, Astley & Co.
Bromley, C. (Gout & Rheum.)
Burgess, E., Jun.
Clay, Dod & Co.
Cox, Arthur H., & Co. (tactiss)
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Duncan, Flockhart & Co.
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Evans, Sons & Co.
Harroline Pill Co.
Heaton, Squire & Francis
Hill, A. S., & Son
Holloway's
Lloyd, T. Howard, & Co.
Lorimer & Co.
McKesson & Robbins
Newbery, F., & Sons
Potter & Sager
Richardson, J., & Co., Lim.
Wand, S. (Pearl Coated)
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Leaves, Lim.
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Bradley & Bourdas (Albatur)
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Toogood (E.C. Pots, regist.)

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Boehm, Fredk.

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Lee, J. Ellwood (Hatrack &
Co., Lim.)

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Macfarlan, J. F., & Co.

Maw, S., Son & Thompson
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Richardson, John, & Co. (Lei-
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Robinson & Sons
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Victoria Rubber Co.

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Fletcher, Fletcher & Stevenson

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Iris & Co., Lim.

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Becham, T. [Lim.]

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Sutton, O., & Co. (Block)

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Howards & Sons
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VACCINATION

Vaccine Association (Lymph)

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Lorimer & Co.

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Fassett & Johnson

Ferris & Co.
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Heaton, Squire & Francis
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Hodgkinson, Treacher & Co.

Kemp, Wm., & Son
Lloyd, T. Howard, & Co.

Lofthouse & Saltmer
Macfarlan, J. F., & Co.

Potter & Clarke
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Durrant & Co.

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1,000 PILLS IN SHOW VASE, 5/6.

PIONEERS IN THE PILL TRADE!

Highest Award, Chicago, 1893.

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SMALL SUGAR-COATED PILLS,

Unequalled in their medicinal properties or in SOLUBILITY, the best ingredients being invariably employed.

Suitable for Retail Sale, in Screw-capped Pill Tubes. Not liable to Stamp Duty unless specially recommended or sold as "Proprietary."

No. 142.—Gran. Cath. Comp. (Little Cathartic Granules).
Albin, 1-10 gr.; Podophyllin, 1-5 gr.; Ext. Hyosey., 1-20 gr.;
Jalapin, 1-10 gr.; Ext. Nuc. Vom., 1-20 gr.; Ol. Res. Capsici,
1-20 gr. Dose, 1 to 4.

Per 1,000,
in Plain Bottle.
4 -.

Per Small Stoppered Vase,
with painted glass label,
5 6.

Per Stoppered Vase,
with painted glass label,
(5,000), 21 -.

No. 180.—Gran. Cath. Co. e. Euonymin.—Same as "No. 142," except that 1-5 gr. Euonymin is used instead of 1-5 gr. Podophyllin.
Prices same as for "No. 142."

An "all-round" Antibilious Pill, which has found favour wherever introduced, is "No. 120" ("Pil. Cathartic & Liver").

No. 120.—Pil. Cathartic and Liver.
R. Podophyllin, 1 gr.; Ext. Colocynth, 1 gr.; Pv. Soc. Aloes,
1 gr.; Pv. Scammony, 1 gr.; Pv. Saponis, 1 gr.; Ext. Hyosey-
ami, 1 gr.; Gingerine, 1 gr. Dose, 2 to 4 pills as a purgative,
1 to 2 pills as an aperient.

Per 1,000,
in Plain Bottle,
4 -.

Per Stoppered Vase,
with painted glass label,
6 4.

Per Bottle
(Bulk) of 5,000,
18 9.

Write for New Complete Price List of PILLS, GRANULES, and PARVULES, &c., by W. R. WARNER & CO., giving upwards of 250 Excellent Formulæ, at moderate and greatly reduced prices.

Depot: F. NEWBERRY & SONS.

"LEADERS."

The Eureka Spatu.

A Steel Spatula coated with Vulcanite.

DO NOT RUST.

ARE EASILY CLEANED.

MAY BE USED FOR ANY OINTMENT.

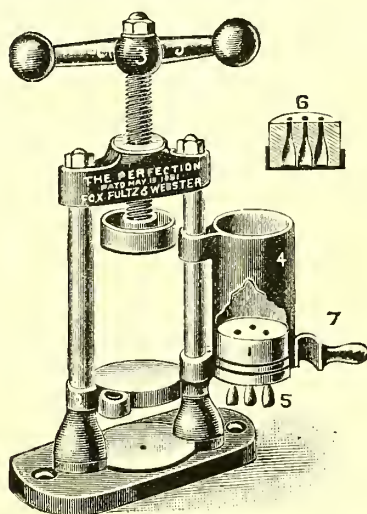
ARE CHEAP OWING TO THEIR DURABILITY.

THE HANDLES ARE BALANCED AND VERY STRONG.

3	4	5	6	7	8	9	10-inch blades.
17/6	20/-	23/-	28/-	39/-	43/-	50/-	62/-

We are **SOLE AGENTS** for the United Kingdom, and ask you to try them, and are certain you will be charmed.

The Perfection Suppository Machine.



MAKES SUPPOSITORIES BY COLD COMPRESSION.

MAKES SUPPOSITORIES WELL.

MAKES SUPPOSITORIES WITHOUT TROUBLE.

ALL SUPPOSITORIES SHOULD BE MADE BY THEM.

Detailed Pamphlet on application.

Price, complete with Dies, 52/6.

Sprays.

Elegant glass-fronted Show Case containing $\frac{1}{2}$ doz. cut-glass Sprays, gilt mounts, red rubber, double balls, 15/.

Camphor Ice.

In printed tin boxes, bearing no name, only Brand, "The Acme."

1d. size	..	..	..	..	..	..	..	8/- per gross.
2d. "	..	..	..	..	..	..	..	12/- "

Cod Liver Oil.

Finest non-freezing Norwegian.

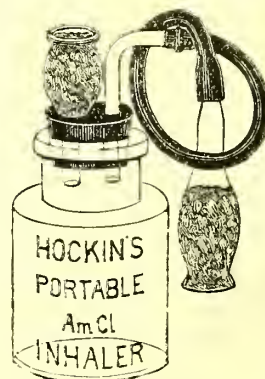
Elegantly Engraved Label, 6 dozen with Buyer's own name.

4 oz. bottles, Imperial	..	2/6 per doz.	Each	2/9 per doz.
8 " " "	..	4/6 "	Bottle	5/- "
16 " " "	..	8/- "	in	8/6 "
32 " " "	..	13/- "	Cartoon.	14/- "

Also supplied in bulk. Write for prices.

Hockin's Portable Am.

Cl. Inhaler.



EFFICIENT. EASILY USED. CHEAP.

Complete in box with acid and ammonia 2/6 each.

Terms: Net Cash Monthly Account. New Accounts must be accompanied by Remittance or London Reference.

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HOCKIN, WILSON & CO.,

Wholesale Druggists, Druggists' Sundriesmen,

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD,

And at MANCHESTER.



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BAILEY'S SUSPENSORY BANDAGES.

A. B. C. SYSTEM.

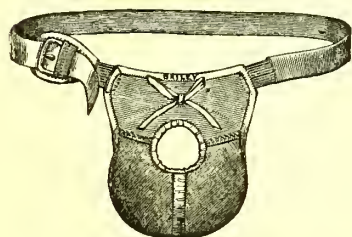


FIG. 1.

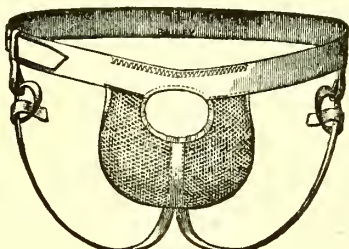


FIG. 2.

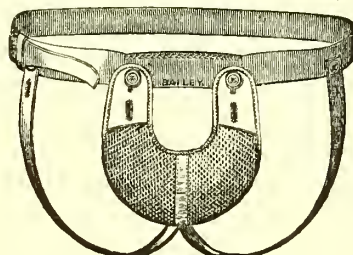


FIG. 3.

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The Foregate, WORCESTER.
GENTLEMEN,—Please repeat our last order for "Suspensory Bandages." We think your idea of arranging the sizes and qualities by the use of numbers and letters a very excellent one, as it is most convenient to the Chemist in ordering, and we find our customers make use of your method. It brings us many repeat orders.

Yours faithfully,

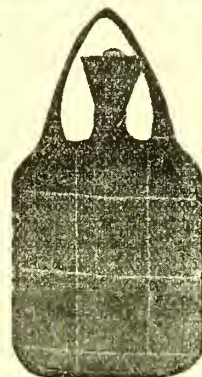
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HOT-WATER BOTTLES.



All Chemists should try our "Comfort" Hot-water Bottles, made in Drab, Red, Black and Cloth covered. Retains its heat longer, and affords a more soothing effect than any others. Free from objectionable smell, and, being fitted with Patent Safety Screw, all risk of scalding in filling is prevented.



JACONETS (Pink, Brown, and Double Texture), **BED SHEETINGS**,
SPONGE BAGS, **NURSING APRONS**, &c.

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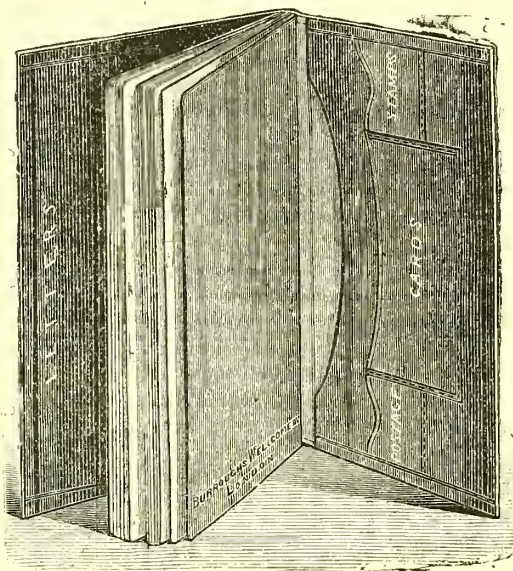
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Acceptable Christmas Presents.

The "A B C" MEDICAL DIARY and VISITING LIST

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As in previous years, this publication contains in a concise form the most recent and reliable information regarding therapeutics, culled from the last editions of works on this subject, as well as from English, Colonial, and Foreign medical journals, &c., the authorities in each case being quoted to facilitate further reference. This Medical Diary and Visiting List has been received in past years with the highest favour and satisfaction by medical men, as well as by pharmacists desirous of making seasonable acknowledgments to their professional friends. Certainly they could not choose a more appropriate one, or one more likely to be well appreciated.



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Russia Leather	30 ..	Velvet Pile	50 ..
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The "Tabloid" form of Compressed Drugs has fairly revolutionised the system of filling Medicine Chests and Cases, and is



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particularly well adapted to the equipment of Cases intended for the pocket, or for a place in the carriage. The portability, completeness, practical character, and usefulness of these Cases are admittedly points of real value in estimating their suitability as presents, especially to medical men whose practices are located in rural districts and extend over a wide area. We shall be happy to send our list, giving particulars and prices, on request.

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(B., W. & CO.)

We have recently introduced this with a view to providing a handy and compact Case, furnishing every requirement for hypodermic use in dental practice. The Case measures 4½ by 2½ by 1½ inches, and contains a specially constructed Syringe with both curved and straight incorrodible needles; a removable Syringe Holder (which is a unique feature); Hypodermic "Tabloids" of Cocaine, ¼ and ½ gr.; Atropia Sulph., ⅓ gr.; Apomorphine, ⅓ gr.; Caffeine Sodio-salicylate, ½ gr.; Morphine Sulph., ¼ gr.; and a small glass mortar and pestle. Medical men who devote particular attention to dentistry will fully appreciate the convenience and portability of this case. Price, fitted complete 21/.

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Ophthalmic "Tabloids" have recently been introduced to the notice of the Medical Profession as a method of applying remedies to the eye which is free from the many objections to the use of solutions or gelatine discs. They are tiny bi-convex discs of the thickness of note paper, very soluble, and contain each a definite quantity of alkaloid combined with an absolutely sterile and innocuous basis. The case contains nine tubes of "Tabloids," a "Tabloid" holder, two camel-hair brushes, a medicine dropper, and a small glass mortar and pestle for rubbing down those "Tabloids" which are intended for use in solution. It measures only 2½ by 1½ by 1 inch.



Supplied to the Medical Profession, fitted complete, 7/6 each.

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Every Chemist

SHOULD USE

"LANOLINE" AS AN OINTMENT BASE,

AS IT

never turns rancid;

admits of the admixture of any quantity of water;

confers stability and permanence on ointments prepared with it.

UNGUENTUM LANOLINI

is an Ointment

WHICH CONSISTS OF

"LANOLINE" and 30 per cent. of Soft Paraffin B.P.

UNGT. LANOLINI is comparatively inexpensive.

UNGT. LANOLINI is non-sticky.

TOILET "LANOLINE."

A SUPERIOR PREPARATION FOR THE SKIN.

IN TUBES CONVENIENT FOR USE IN

**SUNBURN, CHAFING, CHAPPING, REDNESS, AND
WRINKLING OF THE SKIN.**

"LANOLINE" and its preparations, Soaps, Pomades, &c., can be obtained from

BURROUGHS, WELLCOME & CO.

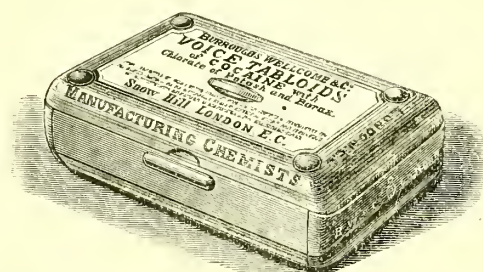
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AS AN OFFICIAL JOURNAL

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—PHARMACEUTICAL SOCIETY OF IRELAND, SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION, MIDLAND PHARMACEUTICAL ASSOCIATION OF NEW ZEALAND, CENTRAL ASSOCIATION OF NEW ZEALAND, OTAGO PHARMACEUTICAL ASSOCIATION, PHARMACEUTICAL SOCIETY OF QUEENSLAND, PHARMACEUTICAL SOCIETY OF SOUTH AUSTRALIA, PHARMACEUTICAL SOCIETY OF WESTERN AUSTRALIA, and TASMANIAN PHARMACEUTICAL SOCIETY.

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OUR DIARY COMPETITION.

WE remind our home subscribers that the pink coupon sent out with the DIARY should be filled in and returned to us during the incoming week. If we may judge from those already received, the competition promises to be an interesting one, apart from the most difficult question (which will fall upon us)—namely, the distribution of the ten guineas which we are to divide amongst the competitors. The coupons are to be filled up by subscribers or their assistants, apprentices, or members of their families.

OUR WINTER ISSUE.

THE CHEMIST AND DRUGGIST of January 27, 1894, will be the Winter Issue, and we can insert circulars or price-lists in it. Such insets will be stitched in, and will go to 11,000 members of the trade who are buyers. Since the year 1859 we have been building up our registers, and we believe that there does not elsewhere exist such complete registers of firms and men in business in connection with the drug and chemical trades and pharmacy, with whom THE CHEMIST AND DRUGGIST is known and respected as a reliable trade journal, and circulars and advertisements inserted in it carry with them proportionate *kudos*. Our charge for the insertion of circulars is only a fraction of the cost of addressing and sending by post, while we give the additional advantages of a superior list of buyers, and the assurance of preservation in a most handsomely produced journal which no one thinks of throwing into the waste-paper basket. Please apply to the Publisher for particulars.

Summary.

A CHAT with a Grasse essential-oil distiller is one of the features in our Town Traveller's page this week.

BRIGHTON and Sunderland chemists have had a good time—the former smoking, the latter dining and toasting.

DR. TILLIE, an assistant to Professor T. R. Fraser, has given an Edinburgh audience his views on patent medicines.

THE President of the Paris Academy of Sciences has protested against the growing use of long words in botany and chemistry.

WE conclude the correspondence on "Company Pharmacy" this week. There is a large number of letters on the subject, and we sum up editorially.

MESSRS. HELBING AND PASSMORE, in a note printed in this issue, dispute Mr. Dott's views as to the eucalyptol standard to be fixed for ol. eucalypti, B.P.

IN the Corner for Students Mr. R. J. Moss makes some instructive remarks regarding the use of hydrochloric acid along with sulphuretted hydrogen.

THE late Sir Andrew Clark, M.D., has left nearly a quarter of a million personalty. We give some particulars of his will; also of the late Mr. John May's and Mr. Kilner's.

IN our French news are further particulars of the proposed municipal pharmacy at Roubaix, which the advanced party show no disposition to abandon.

THE Chemists' Assistants' Association discussed "Pharmaceutical Education" at last week's meeting, Mr. Jowett, B.Sc., leading off with advanced views on the subject.

THE question whether baking-powder is a food and therefore subject to the Sale of Food and Drugs Act has been argued before the High Court. Judgment is reserved.

THE Court of Appeal has dissolved the interim injunction granted by Mr. Justice Bruce to prevent the Birmingham Vinegar Brewery Company from publishing a libellous statement regarding Messrs. Champion & Co.

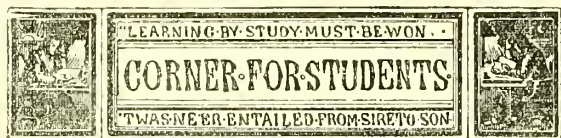
A GROCER having been summoned at South Shields for selling malt-vinegar which Mr. Stocks, the analyst, reported to be adulterated, the Magistrates have dismissed the case on the ground that the Somerset House chemists and Mr. F. Sutton considered the sample to be pure.

THERE has been an inquest at Derby regarding the death of a child from convulsions. The doctor said they were brought on by opium; but as the chemist who supplied the mixture given showed that the dose contained only a tenth of a drop of paregoric, the jury did not agree with the doctor.

MR. JUSTICE ROMER has given his decision in the Lanoline case. He finds that the patent is good, and that "Anaspaline" infringes it. The subject-matter of the patent specification and the scientific evidence given before him are discussed learnedly by the Judge, whose speech we report verbatim. Damages and expenses are awarded to Messrs. Benno Jaffé & Darmstaedter.

MICROBES IN THE ART OF WAR.—A French naval surgeon, Dr. Le Dantec, has examined the arrow-poison used by the natives of New Hebrides, who employ for this purpose earth from marshy places; it contains both the septic vibrio and the tetanus bacillus. From experiments on animals, it was found that when the poison was old they died from tetanus; when fresh, from septicemia. In the case of man, tetanus has always been observed.

THE presentation to Mr. George Chaloner, F.C.S., on his retirement from the position of lecturer on chemistry at the Birkbeck Institute, after twenty-five years' service, consisted of an illuminated address, and a purse containing 92*l.* 1*s.* In acknowledging the gift Mr. Chaloner said his students had numbered over 2,500, and some of them had made positions of importance for themselves. The late Mr. Gilchrist Thomas was one of his early students.



CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

REPORTS.

THE powder sent to correspondents last month consisted of 1 part of mercuric chloride, 2 parts of copper sulphate, and 2 parts of zinc sulphate. Its calculated composition was as follows:—

Hg	..	..	..	..	..	14.76
Cu	..	..	..	..	..	10.17
Zn	..	..	..	..	..	9.05
SO ₄	..	..	..	..	..	28.77
Cl	..	..	..	..	..	5.24
H ₂ O	..	..	..	..	..	32.00
						<u>100.00</u>

There was a trace of iron present.

The number of packets of the mixture of salts issued to correspondents was 90, and the number of reports received 56. The failures in the detection of the constituents of the mixture were—mercury 8, copper 2, zinc 23, sulphuric radicle 0, chlorine 4. In many cases there were other substances reported present; several students stated they detected nickel, a few recorded either tin, antimony, or arsenic as constituents of the powder.

Most of the errors in this analysis arose from two causes—the difficulty of completely precipitating the copper and mercury, and the difficulty of avoiding the precipitation of zinc along with the copper and mercury. When a precipitate is obtained with sulphuretted hydrogen in the ordinary course of an analysis, it is necessary to ensure, before filtering off the precipitate, that precipitation is complete. The beginner will find that the best plan is to filter part of the liquid, and, if there is much free acid present, to dilute the filtrate, and again submit it to the action of sulphuretted hydrogen. If no further precipitate is produced, precipitation may be regarded as complete. This is a better plan than trusting to the smell of the liquid. In this particular analysis it took a long time to precipitate the mercury and copper in the presence of a moderate excess of hydrochloric acid. The question may be asked, Why not use less hydrochloric acid? This brings us to the other difficulty in the analysis—the one which gave rise to most of the errors. If an insufficient quantity of hydrochloric acid were used, the zinc was precipitated along with the copper and mercury. It was possible to precipitate the zinc in this way so completely that no trace of it appeared in its proper place amongst the metals separated as sulphides and hydrates from an alkaline solution. Those who failed to detect zinc in the powder will find it an instructive experiment to pass sulphuretted hydrogen through a solution of zinc sulphate, and to observe the copious white precipitate that is thrown down; then try the same experiment with solutions containing different quantities of hydrochloric acid. It will be found that slight acidulation is not sufficient to prevent the precipitation of some of the zinc. In the presence of certain acetates the difficulty may be much greater, and special precautions must be taken to detect zinc and to prevent it from interfering with the detection of other metals. The chief lesson to be drawn from this analysis is that hydrochloric acid is not to be regarded merely as a reagent for the detection of lead, silver,

or mercurous compounds, but as a medium for ensuring the desired precipitation of certain sulphides only by the action of sulphuretted hydrogen.

A. E. THLSON.—We congratulate you on being the first lady prize-winner in the "Corner for Students" competition.

COGITO.—Great caution should be observed in using a cyanide as a reagent; on no account should a solution to which a cyanide has been added be left unlabelled or treated so as to expose one to the risk of inhaling the vapour of hydrocyanic acid.

H. D. HARRIS.—Your work was very good so far as it went, but you did not give sufficient proof of the absence of other acid radicles.

TODOFORM.—Before entering upon a general search for many acid radicles, you should have considered which of them could be present, having regard to the fact that mercury, copper, and zinc had been detected, and that the powder was soluble in water.

SULPHOVIN.—The trace of iron should not have escaped detection.

ALLOXAN.—Your work was not sufficiently exhaustive. Bear in mind that you are required to give proof that the substances detected are the only constituents of the mixture.

TRIONAL.—You are not required to do the work without the aid of books; on the contrary, we prefer that you should avail yourself of the use of the best books within your reach. You will find it very difficult to effect a perfect separation of copper, manganese, and zinc by the method you mention. Iron and manganese interfere with the solubility of zinc hydrate in the caustic alkalis. Zinc hydrate is less soluble in boiling solutions of the caustic alkalis than in cold solutions.

DANWELL.—There was not a trace of nitrate present. It would have been more satisfactory if you had separated the heavy metals before applying the ferrous-sulphate test.

A. JONES.—In testing for acetic acid you should not conclude that acetic ether is produced without comparing the odour of the vapour in question with that obtained from a known acetate, unless you are so familiar with the odour that a mistake would be impossible.

R. B. CARNEGIE.—See remarks to A. Jones.

DULCAMARA.—If there was any excess of ammonia in the solution to which you added ferric chloride, ferric hydrate would have separated, and, though different in appearance, you might have mistaken the change in colour for the effect produced by acetates.

H. A. L.—You should familiarise yourself with the effects of heat upon salts so as to distinguish charring; note particularly the behaviour of inorganic salts of copper and cobalt.

CARYOPH.—The solution through which you passed sulphuretted hydrogen was not sufficiently acidulated to ensure that the zinc should remain in solution.

W. G. S.—Copper sulphide is slightly soluble in ammonium sulphide: the precipitate you thought due to tin and arsenic was due to copper. The sulphur precipitated at the same time makes the copper sulphide thrown down from its solution in ammonium sulphide look yellowish brown in colour instead of black.

ESCLAP.—See remarks to "W. G. S." You do not appear to have expelled the sulphuretted hydrogen before using ammonia as a group-reagent.

M. D. R. D.—If you obtained a yellow crystalline precipitate with platonic chloride it was because you had not completely expelled ammonium compounds.

FRANGO.—You did not completely precipitate the copper and mercury with sulphuretted hydrogen, hence the black precipitate, insoluble in dilute hydrochloric acid, subsequently obtained with ammonium sulphide.

ZYMINE.—The whitish precipitate you obtained with ammonium sulphide was zinc sulphide. You must have made some mistake in the application of the potassium-ferrocyanide test.

WILL.—See remarks to "W. G. S."

CONRAD.—The reaction you describe with sodium phosphate was impossible, unless you accidentally added some magnesium salt.

VICTORY.—Your report was so badly arranged that it was almost impossible to tell what precipitate, or what filtrate, you referred to.

W. BLAKELEY.—The colour of the filtrate showed that you had not completely precipitated the copper. It was this copper that you subsequently mistook for nickel.

M. A. G.—See remarks to "W. G. S."

NOVISIMO.—A sulphite would have evolved sulphur dioxide on the addition of hydrochloric acid without the aid of heat. The fumes you observed were fumes of hydrochloric acid.

A. THORPE.—The behaviour of the powder on heating alone and with sulphuric acid proved the absence of a tartrate instead of suggesting its presence.

P. MILLIDGE.—In testing for a chloride you should have remembered that sulphates were present. The silver precipitate was only partially soluble in nitric acid.

DEWSBURIAN.—If the mixture had been composed of the substances you reported as present, it would not have dissolved in water. The precipitate you obtained with calcium chloride was calcium sulphate, not citrate.

When you heated the powder you did not observe the burnt-sugar colour characteristic of tartrates and citrates. You will find practice will make a great difference in your work.

ANALGEN.—When the powder was heated in a tube, there was a very well marked sublimate produced, which you failed to observe; this sublimate was easily shown to consist of mercuric chloride. There is generally a great deal to be learned from a close observation of the effects of heat upon the substances under examination.

CAMPANULATE.—See remarks to "Analgen."

HOPEFUL SECUNDUS.—You are not expected to give quantitative results. The calculated composition stated above is intended for the information of our contributors who like to know what quantities they had to deal with. If the powder had consisted of the salts you reported present, it would not have produced the sublimate you observed.

NEMO.—Your report would be greatly improved if you assigned separate columns to your group-precipitates, subdividing these columns when necessary; this is by far the best way of recording the results of a qualitative analysis.

S. R.—There is a want of system in your work; you must study with the aid of a good text-book, using mixtures of your own preparation. You applied a number of tests indiscriminately instead of using the group-reagents in proper order, and examining the group-precipitates. Before applying the platinum-chloride test for potassium, salts of ammonium must be completely expelled by ignition.

D. W. C.—You proved to your own satisfaction, by six different reactions, that a borate was present, although there was no such salt in the mixture. In describing an experiment you should endeavour to state exactly what you did, not what you think you ought to have done; and in recording your observations state exactly what you observed, not what you think you ought to have observed.

P. S. A.—The colour of the powder must surely have suggested the presence of copper.

C. O.—Notwithstanding the accident which prevented you from proceeding beyond the preliminary examination, your results were not far astray.

English News.

The Editor is obliged to co-correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Carbolic-acid Poisonings.

Henry Frederick Howard, aged 48 years, clerk to Mr. J. Eastwick, lodged at 14 Bothwell Terrace, Lambeth Walk. He had of late been in great monetary difficulties. He owed about seven months' rent, and on Tuesday of last week the landlord put a man in possession. He was found sitting in a chair, quite dead. Beside him were three small phials labelled "carbolic acid—poison." Dr. Philip M'Mahon Macdermott said that deceased had swallowed 3 oz. of pure carbolic acid—sufficient to kill a great number of people. The mouth, tongue, and throat were white, shrivelled, and corrugated by the action of the corrosive poison. The coroner's officer stated that the deceased went to a chemist to whom he was well known, and asked for three separate 1 oz. bottles of pure carbolic acid, saying it was for use at his office. To show the desperate nature of the act the witness mentioned that the deceased must have drunk the contents of each bottle separately, actually recorking two of the bottles. The jury returned a verdict of temporary insanity.

A lady, fully dressed, was taken to the Royal Free Hospital a little before midnight on Wednesday of last week, writhing in pain. It was stated that she had poisoned herself by drinking carbolic acid at her residence close by, 31 Calthorpe Street. It was found that from 1 to 2 oz. of carbolic acid must have been swallowed, and in spite of all efforts she succumbed after some hours of agony. It has since transpired that deceased was Louis Maria Fraser (30), a governess, and wife of a man now in Chicago. At the inquest on Saturday the jury came to the conclusion that she drank the carbolic acid with suicidal intent.

A Portsmouth coroner's jury concluded an inquest on Monday regarding the death of Alice Maria Salter (20), a servant girl. The jury agreed that she had committed suicide by taking carbolic acid on December 9.

Sunderland Chemists at Dinner.

The annual dinner of the members of the Sunderland Chemists' Association was held in the Grand Hotel on December 13. Ald. Thompson, J.P., occupied the chair, Messrs. R. Robinson and J. Mitchinson the vice-chairs, and the Mayor and nearly forty other gentlemen were also present. The Mayor and other visitors made speeches. In proposing the toast of "The Pharmaceutical Society of Great Britain" Alderman Thompson aired a chemist's grievance, which he said he had harped upon for many years, namely, the dispensing of prescriptions by medical men. He strongly maintained that doctors should only prescribe for their patients, and that chemists should make up the prescriptions. Councillor Harrison responded.

Laudanum for a Baby.

On December 14, at Pill, Somerset, Dr. Craddock, coroner, held an inquest on the body of Mary Ann Endicott, aged 4 years, the daughter of Emma Endicott, laundress. Emily Butcher, who said she had had charge of the child since it was only 10 days old, gave evidence of the child's illness and death. In the course of her evidence she said she had given the child a little laudanum every day from the commencement. At first she had only one drop, but the dose had been gradually increased to ten drops. She could not keep the child quiet without the use of laudanum.

The Coroner: By whose advice did you give her the laudanum.

Witness: People told me.

Tell me the name of one person?—I did it myself. Perhaps I ought not to have done it.

Continuing, she said she told the doctor she had administered laudanum. She had been paid 4s., and latterly 3s. a week for the maintenance of the child.

Mr. Alexander Ross, surgeon, Portbury, who was called in before the child died, said he could not say that the child died from opium poisoning.

The Coroner, summing up, said that one drop of laudanum was enough to kill an infant; ten drops was a most extraordinary quantity for a child of four years.

The jury found that the child died from epileptic convulsions, probably caused by indigestible food, and they desired the Coroner to censure Mrs. Butcher.

Mrs. Butcher having been recalled, the Coroner warned her that she had had the narrowest possible escape from having a verdict of manslaughter returned against her. He hoped it would be a lesson to her for life.

The woman, who seemed to be impressed with the gravity of the case, promised that she would never touch laudanum again.

Brighton Chemists are Gay.

On Wednesday, December 13, a smoking concert was given by the Senior and Junior Association of Chemists, at the Clarence Rooms, Hôtel Métropole. There were over a hundred present, Mr. W. H. Gibson, F.C.S. (President of the Senior Association), occupying the chair. The programme comprised songs and recitations by Messrs. A. E. Colman, A. Collins, Jarvis, Lloyd, Keatts, J. R. MacDermott, H. G. Price, F. Padwick, E. Payne, Sharp, Hedgcock, and Lauder, and instrumental performances by Messrs. G. Bastion and Wood, members of the Métropole orchestra, who were present by permission of the leader, Mr. Fleet, who also assisted himself. A cornet solo was given by Signor D. Camera, conductor of the Brighton Corporation Band, and selections by a trio of mandolins and guitars were performed by Signor Angelici and daughters. Mr. Norman Roe was exceedingly hard-worked as accompanist.

During the evening the Chairman announced the names of the successful competitors in the recent examination in the Junior Association. First prize, value 1/, presented by the Senior Association, was awarded to Mr. Inman. Second, value 10s. 6d., presented by the Senior Association, was secured by Mr. Shackleton. Third, value 10s. 6d., presented by Mr. W. H. Gibson, was taken by Mr. Bridgwood. Fourth, value 10s. 6d., presented by Mr. E. Histed, was allotted to Mr. Clark. A hearty vote of thanks was passed to Mr. E. Histed, who had taken the greater share of the trouble in arranging the examination. An announcement was also made to the effect that the annual ball would be postponed.

from January 10 to 17, 1894, and that another smoking concert would be held on January 10, under the same conditions and in the same place as on the present occasion.

The Chairman also made known amid much cheering, that the Brighton candidate, Mary Wavell, had been elected on the Pharmaceutical Benevolent Fund, by 3,000 votes, a fact which he ascribed chiefly to the action of the Brighton chemists.

An illuminated testimonial was brought forward, expressing the thanks of the Association for the past services of Mr. Marshall Leigh, as Secretary of the Association, and their regret at the circumstances which deprived them of his further assistance. Owing to the absence of Mr. Leigh, the presentation was deferred. Votes of thanks were passed to Mr. A. E. Colman, for arranging the evening's amusements, and to the Chairman.

Boxes on the Footpath.

Mr. James Bridge Francis, chemist, Wrexham, was summoned to the Borough Magistrates' Court on December 11 by P. C. Tippet for having allowed three large boxes to remain on the footpath opposite his shop in Hope Street. The officer said the boxes occupied the space named from 12 o'clock to 1 o'clock, on Saturday, December 2. Mr. Francis said he was away on the date named, and knew nothing of the case, but the boxes could hardly be called large. A fine of 1s. and costs was imposed.

Selling Methylated Spirit without a Licence.

On December 16, at Horncastle, Henry Lunn, chemist and grocer, was summoned by the Inland Revenue Department for selling methylated spirit without a licence. Defendant pleaded that it was purely an inadvertence, and that he did not know until recently that he required a licence to sell methylated spirit, and as soon as he knew he took out the necessary licence. A fine of 1*l.*, including costs, was imposed.

Boarding Terms at the Queen's Hotel.

At the Liverpool Police Court on December 14, John D. Elliott, 60, was charged with stealing a packet of sweets, the property of Mr. H. Peet, chemist and druggist. Two detective officers saw the defendant loitering about Ranelagh Street. After going into the refreshment room of the Central Station, he went to Mr. Peet's shop and stole the packet of sweets from the counter. When charged with the theft, he replied, "I do not know what I am doing." On being searched at the station 32*s.* 8*d.* was found in his possession. The defendant was sentenced to three months' imprisonment, and was ordered to defray the cost of his maintenance whilst in goal.

Drug Contracts.

On Monday at a meeting of the St. Marylebone Board of Guardians tenders were received for the ensuing quarter's supply of drugs to the infirmary at Notting Hill and the North and South dispensaries, and that of Messrs. Hodgkinson, Prestons and King for the supply of the same for the sum of 209*l.* 7*s.* 3*d.* was accepted. Five tenders were also received for the quarter's supply of druggists' sundries, and that of Messrs. S. Maw, Son, and Thompson for the sum of 103*l.* 0*s.* 10*d.* was accepted.

The Cannock Board of Guardians has accepted the tender of Mr. T. W. Garland, Cannock, for linseed meal at 2½ per lb. and saltpetre at 3½ per lb.

Steedman's Powder Exonerated.

An inquest was held last week by Mr. A. Braxton Hicks at Battersea concerning the death of a child named Mary Ann Frean, who died at the residence of her parents at Sheepcote Lane. The mother was the principal witness called, and said that the child was taken unwell a few days previously to its death, and thinking there was nothing serious the matter she gave it a Steedman's powder. It grew worse, however, and died a few days afterwards. Dr. A. Clarke deposed to having been called in, but upon arriving at the house he found that the child was dead. He afterwards made a post-mortem examination, and had no hesitation in coming to the conclusion that death was due to spasm of the glottis, brought about by dentition. In his opinion, the Steedman's powder had in no way contributed to

the death. The jury found that the child died from natural causes.

Was the Chemist or the Doctor to Blame?

At an inquest concluded on a four months' old child at Derhy, on Monday, it was stated by the mother that she bought some stuff from Hart's chemist shop in Sadler Gate to ease the deceased's cough. She gave 4 or 5 drops. Shortly afterwards the child was seized with a fit of convulsions, which terminated fatally. At the first hearing Dr. McKay gave it as his opinion that the mixture contained opium. At the second hearing the mother said she had discussed the case with her husband. He said she had put bigger "drops" into the spoon than the jury imagined, and he advised her to explain this when she went before them again. Dr. McKay only saw the deceased once, and witness was never informed by him that there was any danger. He only said that it was the child's teeth.

Mr. C. D. Hart, from whom the mixture was purchased, explained the nature of the mixture, which, he said, was more of an anodyne than a narcotic. A full teaspoonful would not be injurious to a child of four months, and 4 or 5 drops in a teaspoonful of water would certainly not harm anyone. There was only one drop of paregoric in forty, which was a very small dose indeed.

Dr. McKay was then recalled. He adhered to his former statement that the opium contained in the mixture brought on the convulsions which caused death. It was a poor, unhealthy child, and that probably had something to do with its condition. He only saw the child once, and it was then brought to his house by the mother. Witness was upstairs at the time, and his wife brought the child to him in his room. He saw at once that it was suffering from a narcotic. He made up a powder, and told the mother to give it to the child at once. He never told her that the child was suffering from opium poisoning, because he did not think it would do any good. Witness examined the body after death, and its condition was quite natural. He should not have expected to find any traces of narcotic poisoning after death in a child of that sort.

The Coroner: What do you mean by a child of that sort?

Witness: Well, the opiate had probably worked off before the convulsions set in which caused death. The pupils were dilated when he saw the deceased alive, which was a sure sign of opium poisoning, but they were perfectly natural after death. He repeated that the cause of death was convulsions, accelerated, although he would not say caused, by narcotic poisoning.

A Juryman: Don't you think as a medical man you ought to have visited the child if you thought it was in such a dangerous condition?

Witness: I should not have been able to have done the child any good, but I certainly might have gone. He was never asked to see the child.

Another juryman stated that the witness appeared to have treated the child in a very careless and indiscriminate manner.

Another juryman asked why if the doctor thought the child was in a dangerous condition, he did not administer the powder himself there and then, instead of sending the mother home to give the powder and so delay relief.

Witness: The thought never entered my head. He never told his wife to tell the mother that the child was suffering from teething, and that must have been the result of some conversation between the women themselves.

The jury returned a verdict of death from convulsions.

Morphia the Consoler.

On December 15 Dr. Danford Thomas held an inquest at Clerkenwell, respecting the death of Joseph John Hague, aged 51 years, by trade a surgical instrument maker, but lately the keeper of a drug and sundries shop, 75 Pentonville Road. Matilda Hague, the sister, said she thought deceased was worried about business matters, and in addition he got muddled, but for all that she did not think he would take his own life. She described how he was found on the Wednesday morning in bed, alive, but ill. She sent for a doctor, who applied a stomach pump, but death followed in about fifteen minutes. The deceased left the following letter:—"I go like a strong rope which breaks at the worn strand. My customers are dropping away, and I'm 200*l.* in debt. For

twenty-three years I've been persecuted here, although I have seen children murdered by someone who has tried to do me more harm. My furniture, stock, and practice will pay my debts. I am now going to take an overdose of morphia, and if that's not enough, I must resort to cyanide. Farewell to all, I say. Be more merciful one to another."

Dr. Milburn said he found traces of both morphia and cyanide of potassium, these causing the death.

Mr. John Gardiner, of the firm of Baker, of Holborn, said the deceased had been with that firm thirty years, and was in charge of the surgical instrument department, having while in the employ of the firm travelled England and Wales, gaining a large connection. He left the firm in 1888.

The jury returned a verdict of "suicide whilst in a state of insanity."

Treat to Young Druggists.

On Saturday evening last Mr. J. J. Evans, J.P., entertained the junior members of the staff of Messrs. Evans, Sons & Co., Liverpool, at a "social." About 100 youths and young men sat down to an excellent tea, after which Mr. J. Hope Simpson, manager of the Bank of Liverpool, delivered a robust and encouraging address to the young fellows. During the evening Mr. John Hargreaves gave a delightful lantern lecture on the beauties and antiquities of the "Hundred of Wirral."

Science at 1*1*/2. a Lecture.

A very successful course of technical lectures at Liverpool on "Chemistry in Relation to Everyday Industries," by Dr. Charles A. Kohn, was brought to a conclusion on Monday evening, when a report and prizes were presented. There were eighty enrolled for the class, and of sixty members who have attended regularly, fifty have been working men in receipt of weekly wages. During the course the following subjects were treated:—Petroleum, alcohol, fats and oils, soap, vinegar, coal-tar, coal-tar colours, indigo, and the natural alkaloids. Professor Campbell Brown set papers on these subjects, and thirty members attended the examination. The second course of the series will be commenced on January 15, 1894, when Dr. T. L. Bailey will treat of the following subjects:—Combustion and flame, fuels, sulphur, oil of vitriol, saltpetre, soda, bleaching-powder, lime and cements, phosphorus and matches, and "Water in its Application to Industrial Purposes."

The Leeds Turf Frauds.

Edward Cole, the chemist at Leeds who was convicted with three other men of conspiring to cheat and defraud Knight & Co., turf commission agents, by intercepting telegrams, has been sentenced by Baron Pollock to nine months' imprisonment with hard labour. Two of his associates got the same sentence, and the younger one (Hache), who was clerk to Knight & Co., and who, the Judge considered, had been tempted by the others, was sentenced to six months' with hard labour.

Christmas, Holidays.

The office of THE CHEMIST AND DRUGGIST will be closed from Friday night, December 22, till Wednesday morning, December 27. We have received very few notices of extra closing-days, and believe that most of the City houses will close only on Monday and Tuesday of next week. Messrs. S. Maw, Son & Thompson announce that they shall close on these days for holidays and on Friday and Saturday, December 29 and 30, for stocktaking. Spratt's Patent (Limited), Henry Street, Bermondsey, inform us that their works and offices will be closed on Monday, Tuesday, and Wednesday next.

Irish News.

January Examinations.

The Quarterly Pharmaceutical Assistants' examinations (at Dublin and Belfast) are intended to be held on Wednesday, January 10. The last day for receiving applications for same will be Wednesday, December 27. The Quarterly Registered Druggists' examinations are intended to be held at Dublin on Thursday, January 11; and at Belfast (if 12

apply) on Tuesday, January 16. The last days for receiving applications for same will be:—for Dublin, Thursday, December 28, and for Belfast, Tuesday, January 2.

Complaint against an Apothecary.

At the meeting of the Sligo Board of Guardians last week, complaints of the incivility of the apothecary who had contracted with the Board were made, and the following resolution was passed:—

That the apothecary be informed that the Board are not satisfied with his explanation relative to his refusal to give the necessary medicine on presentation of ticket by the messenger of Patrick Scanlan, on November 11, and that he be called on for a further explanation in writing.

Sale of a Pharmacy.

On Thursday, December 14, Messrs. Battersby & Co., auctioneers, Dublin, disposed of the goodwill, stock, trade-debts, &c., of Price's Medical Establishment, 26 Clare Street, Merion Square, Dublin, after a spirited competition, for the sum of 1,610*1*/2*1*/2, and 5 per cent. auction-fees, amounting to 80*1*/2*1*/2*1*/2. Mr. Bernard, M.P.S.I., was the purchaser, and will take possession on January 20 next. Mr. Bernard has managed the concern for the past eight years for the executors of the late Dr. Price. The business had to be sold on the youngest of Dr. Price's children coming of age.

Scotch News.

An Unlicensed Still.

Messrs. Zechariah Heys & Sons were prosecuted by the Board of Inland Revenue at Paisley on December 15 for having on their premises at Barrhead kept and used a still without having a licence. It was explained that the apparatus was used to obtain absolute alcohol from methylated spirit for oil-testing, and that similar stills were to be found in the laboratories of analytical chemists, who never thought of taking out licences for them, as they were used for experimental purposes. A fine of 2*1*/2*1*/2 was imposed.

A Shop Fitting Case.

In the Arbroath Sheriff Court on December 13, before Sheriff Robertson, Messrs. W. & J. R. Watson, of Leith, sued Wm. Nicoll, chemist, Carnoustie, for 12*1*/2*1*/2, being loss of profit on contract for druggist's fittings. Mr. Watson, jun., stated that his firm had supplied sketches and estimates, which had been accepted by the defender by telegram, but that on the following day the acceptance had been countermanded, and spoke of the loss in time and trouble which had been sustained. The defender said that he did not mean his first telegram to be an acceptance of the offer, but merely an indication to the pursuers that their offer would be accepted. The Sheriff held that the words "start fittings immediately" in the telegram were sufficient to constitute an acceptance, and in the circumstances he decreed against defender for three guineas, with expenses.

Patent and Quack Medicines.

Under the auspices of the Edinburgh Health Society, Dr. Joseph Tillie, F.R.S.E., delivered a lecture on Saturday last on "Patent and Quack Medicines." The lecturer said that most advertised medicines could be described as quack preparations because of the exaggerated or untruthful statements made about them. At the present time comparatively few genuine patent medicines are in common use; but there are a great number of secret or proprietary medicines erroneously and sometimes fraudulently called patent medicines. Nowadays patent medicines are almost always a comparative financial failure; secret medicines, on the other hand, are often a financial success, and the reason was not far to seek. In the case of a patent medicine the compulsory full description of the invention would show immediately to every educated person that in the vast majority of cases there was no originality or merit, or, in fact, any discovery at all. At the present time the price-lists of certain wholesale houses contain the names of several thousand proprietary medicines and foods. The list attached to the

Act of 1812 comprised some 550 preparations, of which 315 or thereby had since passed out of existence. Speaking of quack-medicine advertisements, Dr. Tillie said it is impossible for new-papers to investigate the statements made; but those who administered the law take a very mild view of advertising falsehoods, and of what constituted an offence. In comparing proprietary medicines and the official medicines of the chemist and druggist, Dr. Tillie said that it is very undesirable that there should be any real interference with just trading; but since Parliament has thought it wise to impose rigid and what must prove troublesome restrictions on the trade of qualified chemists it seems unreasonable to permit persons who incur no legal responsibility to sell compounds whose names give no indication of their nature. It is a remarkable feature in our legislation that the public are carefully protected from any misdemeanour on the part of chemists, who have spent years in acquiring an intimate knowledge of drugs, while the wealthy proprietors of secret medicines are allowed to do as they please. Speaking of the stamp, he said that since 1835 its misleading character as a supposed guarantee had been remedied to some extent by the addition of the words, "This stamp involves no Government guarantee"; but on a box of Mother Seigel's operating-pills purchased recently by him in Edinburgh, the stamp was so gummed on the box that the word "no" on the stamp was invisible. The medicine-stamp duty yielded, at the beginning of the century, about 33,000*l.* annually. In 1872 it had reached 82,000*l.*, and it now amounts to 220,325*l.* In concluding, Dr. Tillie referred more specifically to self-treatment of disease with secret preparations.

French Pharmaceutical News.

(From our Paris Correspondent.)

STATUE TO A PHARMACIST.—The town of Angers, which recently erected a statue of Chevreul, has now unveiled another to Boreau, the botanist, who from 1833 until his death in 1875 was director of the Botanical Gardens at Angers. Boreau's "Flora of the Centre of France" is one of the best of his works. At the unveiling of the statue, M. Labesse, President of the Congress Syndicate of Pharmacists, read an address, in which the career of the botanist was traced.

ANTISEPTIC SOLUTIONS.—M. Léon Vignon, lecturer at the Lyons Faculty of Sciences, who has previously shown the disadvantage of using antiseptic products prepared too long in advance—demonstrating, for instance, that lint and cotton-wool bandages impregnated with bichloride of mercury lose their antiseptic power, in consequence of combination between organic matter and the salts of mercury—has now ascertained that a simple aqueous solution of bichloride of mercury also loses a part of its activity by slow decomposition. In less than eight days, he finds, a gramme of bichloride undergoes a loss of 43 per cent. The solution remains about stationary if colouring-matter or an alkaline salt be added to it. M. Vignon's researches were the subject of discussion at the Paris Academy of Sciences recently.

PARIS SOCIETY OF PHARMACY.—At the December monthly meeting of this society the officers for the ensuing year were elected. M. Boymond was nominated president by 21 votes out of 30; M. Julliard was appointed vice-president, and M. Leroy secured the post of secretary by 22. At the same reunion M. Mayet presented the secretary with the minutes of the Pharmacological Committee which assisted in the revision of the Codex in 1866. At the same time he presented an ancient sample of Venice theriaca. M. Guichard showed an automatic flask which has the advantage of permitting the immediate return of the liquid in the bottle containing the reagent. M. Planchon mentioned that he had received a number of materia medica products from M. Azevedo Sampaio, of Brazil, and M. Bourgoin, of Venezuela, which appear to be very interesting, and he is at present studying the specimens.

THE LIFE OF A CHEMIST at the Paris Laboratory during these periods of dynamite scares must be far from a happy

one. When an object looking like a bomb is discovered infinite pains are taken to have it sent to the Municipal Laboratory, and when it is in the hands of the chemists the public mind is at rest. But the experts are not happy, in spite of such compliments as Ravachol's to the director of the laboratory when he said to him, "Ah! M. Girard, anarchy wants a man like you!" The police are much concerned at the active part taken in anarchy of late by M. Paul Reclus. This gentleman belongs to a talented family, his uncle being the well-known geographer of the same name. The nephew is about 30 years of age, and is said to be a clever chemist, having been educated at the Paris Ecole Centrale. A compromising fact is that chemical formulae for explosives, supposed to be in his handwriting, have been found at the address of Vaillant, who committed the outrage at the Chambre des Députés. Meanwhile, however, M. Paul Reclus has disappeared, and he is supposed to have left the country.

LONG WORDS.—At the Paris Academy of Sciences meeting held on Monday, December 13, the President, M. Lacaze Duthiers, commenced the proceedings with a paper on the "Orthography of Scientific Nomenclature." "More than a century ago," he said, "Linnaeus, that great reformer, imposed rules which were always correct, and they are too often forgotten at the present time; he thought that words of too great a length became nauseous; he said, *Nomina generica squipedalia enunciatu difficultia vel nauscosa, fugienda sient*, and Linnaeus was right. Here is one of these words, and excuse me for not pronouncing it: *monolasioellenomonophyllorum*. What would Linnaeus say if he returned nowadays and found someone trying to pronounce in his presence, as I will try to do, the words of modern chemistry. As you know, attempts have been made to colour white flowers artificially. If a portion of my audience wish to have green carnations, they must go to a dealer in chemicals and ask, if they remember the name, for Acid-diethylidibenzylidiamidotriphenylcarbinotrisulphonate." M. Lacaze Duthiers added: "I believe in preserving a reasonable and useful scientific orthography, in spite of the maledictions that may be poured on our heads; even also if we are to pass as pedantic."

THE ROUBAIX MUNICIPAL PHARMACY is likely to have a chequered career if it ever takes a permanent form. The Prefect of the Département du Nord promptly cancelled the first vote of 25,000*fr.* (1,000*l.*) towards a municipal pharmacy, but the Municipal Council of Roubaix unanimously renewed its vote for the purpose, at a meeting held on December 15. The following is the text of the proposal on which the Council voted:—

"In view of the fact that no law exists against a Municipal Pharmacy being established to sell medicaments at cost price, and considering that the duty of a Socialist Municipality is to provide its constituents with the most favourable conditions for all the means of combating maladies and for recovering health, this Council maintains its deliberation of October 13 last under which a credit of 25,000*fr.* is opened for the purpose of establishing a Municipal Pharmacy to sell medicaments at cost price."

Before the vote was carried the following letter was read from M. Vel-Durand, the Prefect:—

"By a resolution dated October 13 last, the Municipal Council of Roubaix voted a provisional credit of 25,000*fr.* towards the installation of a Municipal Pharmacy. The project of opening such a pharmacy supplying the public with medicaments at cost price is protested against by all the pharmacists of the town, who remark that this scheme would ruin the trade which they carry on under the law of 21 Germinal, Year XI. I may add that it pertains solely to the hospitals and public dispensaries specially constituted with that view to open pharmacies as annexes to their establishments, and to distribute medicaments gratuitously to the indigent poor, who are regularly inscribed on their relief-lists. The Municipality can vote subsidies for the purpose of extending the benefits of such assistance if necessary, but it cannot do more under the existing laws, consequently I am unable to approve the resolution passed in this connection by the Municipal Council. You will oblige me by informing the pharmacists of Roubaix of this, in reply to a petition I have received from them on the subject."

A similar opinion expressed by M. Vel-Durand was reported in THE CHEMIST AND DRUGGIST of November 13 last.

A CURIOUS CASE OF POISONING is recorded from Madras. A woman was bitten by a cobra, and while suffering from the poison she nursed her child aged about one year. Both died from the effects of the poison.

Foreign and Colonial News.

THE CHEMICAL INDUSTRY IN JAMAICA.—The West Indies Chemical Works (Limited) is the title of a new enterprise about to be established at Spanish Town, Jamaica, the object being the extraction of dye from logwood, cashaw, and other vegetable substances.

THE METRIC SYSTEM IN RUSSIA.—The first step towards the introduction of the decimal system into Russia will be made with the new year (January 13, old style), when, by order of the Tsar, the chemists of the empire will begin to use decimal weights and measures.

MINERAL-WATER MAKING IN GERMANY.—The police in Posen, Germany, have issued an order prohibiting the use in the manufacture of artificial mineral-waters of any other than distilled water or of chemicals which do not hold the pharmacopœial tests. The penalty for infringing the order is 30s. for each offence.

SCHERING'S CHEMISCHE FABRIK.—At a recent meeting of the shareholders in the chemical works (formerly Schering, of Berlin) it was stated that the nett profits for the first ten months of the current year have amounted to 970,649m., against 1,051,168m. in the same period of 1892. The Russian tariff war and the fall in silver are put down as the causes of the decline in the profits.

A SOCIALISTIC PHARMACY IN ANTWERP.—There are a great many Socialists in Antwerp, and they are very well organised. Step by step they are adopting co-operative supply methods. They already have a bakery, a grocer's shop, and a dry-goods business, and some time ago they started a pharmacy of their own. The pharmacy appears to flourish, although up to the present no figures have been published to show its turnover and profits. The turnover of the four shops combined is over 40,000l. a year.

THE SONS OF LIBERTY AND MEDICINE.—A bronze memorial tablet, placed in the south wall of the building of the Humphreys' Homœopathic Medicine Co., at the corner of John and William Streets, New York, has recently been unveiled. It bears the inscription: "Golden Hill. Here, January 18, 1770, the fight took place between the Sons of Liberty and the British Regulars (16th foot). First blood shed in the war of the Revolution. Erected by the Sons of the Revolution." In revolutionary times the locality where the Humphreys' Medicine Company is now established was known as Golden Hill, and on the spot the first collision of the American war of independence occurred between the Americans and the British troops.

"WAIT OUTSIDE, PLEASE."—An agitation has been commenced in the Berlin Press with the object of compelling the pharmacists of that city to provide suitable waiting-rooms, where persons handing in prescriptions during the night-hours shall be able to wait in comfort while the medicine is being dispensed. Until ten years ago it was the general custom of German pharmacists to allow persons bringing prescriptions during night-hours to wait in the shop, but on October 23, 1883, an assistant in Strassburg was murdered by a scoundrel who had obtained admission to the pharmacy under pretence of handing in a prescription for dispensing, and since then the custom has been adopted in most large cities of making people wait in the street.

THE DUTY ON PETROLEUM JELLY IN FRANCE.—The question has been raised in France, for duty-charging purposes, whether the tariff rates of 32f. or 28f. per 100 kilograms, for vaseline apply not only to petroleum-jelly for pharmacy and perfumery purposes, but also to more or less imperfect petroleum-jellies used for lubricating machines and other analogous purposes. The Consultative Committee of Arts and Manufactures, having considered the question, has given the opinion that the tariff rates above referred to apply only to pure vaseline (also called "natural vaseline"), to the exclusion of greases, heavy oils, and residues intended for lubricating, these being admissible under the heading of "lubricating oils." Ministerial ratification has been accorded to these distinctions, and they will therefore govern the application of the import duties.

PHARMACY IN CAPE COLONY.—The eighth quarterly meeting of the Colonial Pharmacy Board was held in Cape Town on November 9. Six members were present, Mr. W. Pocock occupying the chair. It was brought to the notice of

the Board that several accidents are reported to have occurred owing to the careless use of the arseniate of soda that is being distributed to farmers and others throughout the colony for the extermination of the prickly pear, and it was decided to address the Government on the subject.—Mr. Helmore moved a resolution to the effect that all strong mineral acids ought to be deemed poisons within the meaning of division 2, schedule b, of the Medical and Pharmacy Act, 1893. This was seconded by the President, and passed. In order to ascertain whether the provisions of the Act were being properly observed, it was resolved to ask the Government for a return of sales of poisons by Secretaries of Poisoning Clubs, and to enquire whether the poison books were being properly kept.

PHARMACY AT DAVOS PLATZ.—In our summer issue we called attention to certain charges brought against the Medical Association of Davos Platz, in Switzerland (a body of which twelve out of the thirteen medical men practising in the famous Swiss watering-place are members), by a Mr. J. Amann, formerly apotheker in Davos. Mr. Amann was the aboriginal pharmacist of the *Kurort*, but when Davos grew into a spot of European renown as a health-resort for consumptives the medical men began to be dissatisfied with Mr. Amann's performances in the pharmaceutical line. Reproofs and monitions to march along with the times brought Mr. Amann down upon the medical faculty with counter-accusations of boycotting and terrorising, and the end of the quarrel was that a pharmacist from St. Gall was asked to start a business at Davos and promised medical support. Mr. Amann thereupon wrote a series of articles in the local papers declaring that he was being turned out of his livelihood for no fault of his own. The manager of the new Davos Pharmacy, who is a subscriber to the *C. & D.*, and appears to be utilising the long winter nights in reading the back numbers of this journal, has just written to us telling us that the quarrel between Mr. Amann and the principalities and powers of Davos has been satisfactorily settled, Mr. Hausmann, the St. Gall apotheker, having bought Mr. Amann's business, while that gentleman and the Medical Association mutually withdrew the charges they have made against each other, and which they now discover to have been used only in the Pickwickian sense. So all is well that ends well, and we hope that by the time the intelligent manager in the Davos Platz Pharmacy receives his winter issue of the *C. & D.* he will have caught up level in his reading of current pharmaceutical literature.

THE BORAX KING AND THE CALIFORNIAN HOODLUMS.—The late Mr. Coleman, the American "Borax King," whose death we announced in our last issue, played a prominent part in the stirring days of 1856, when, all the rascaldom in the Western Continent having been attracted to California by the gold finds in that country, San Francisco had become such an Alsatia that decent citizens were put to the choice either of being frozen out by the rascallions, or, in classic phrase, of stamping scoundrelism well under ground and planting wholesome cabbage over it. The order party chose the latter alternative and formed a Vigilance Committee, which acted with so much promptitude, lynching a fair percentage of the scoundrels by hanging and administering the lead-cure to others, that the Pacific Slope gradually again became habitable for decent people. Mr. Coleman was the chief of the committee, and again acted in that capacity in July, 1877, when the "Kearney Mob" prepared to terrorise San Francisco. When Dennis Kearney and his Sandlot mob threatened to sack the city, Mr. Coleman was waited upon by a committee of citizens, and was asked to organise a committee to aid the police. He at once mapped out the work, and within twenty-four hours had several thousand men drilling. The companies were to use pick-handles in their encounters with street mobs, and to employ pistols only in the last extremity. This force of Coleman's saved the Pacific Mail Company's wharf from destruction, and taught the mob so wholesome a lesson that when Kearney had marched his men to Nob Hill he did not have the nerve to order them to burn the houses of Stanford and Crocker, because he was warned that the moment this order was given he would be arrested, and would be tried and hanged (*sic!*) before morning. About two years before his death Mr. Coleman contributed a stirring article on these riots to the *Century Magazine*.

The Winter Session.

LIVERPOOL CHEMISTS' ASSOCIATION.

THE Association met at the Royal Institution on Thursday, December 14, Mr. J. Hocken presiding. The question of the

FEDERATION OF THE LOCAL ASSOCIATIONS

was introduced by the SECRETARY, who stated that the Council had unanimously elected Dr. Symes to represent the Association.

Dr. SYMES, in accepting the office, said that he felt great interest in the question, and was willing to do all he could to bring about a more satisfactory state of affairs. Many organisations got up for special purposes have been known to fail, but from the earnestness and determination shown by the originators of this scheme he was certain it was bound to succeed.

Mr. EDWARD DAVIES, F.C.S., then read a paper on

ARTIFICIAL FEBRIFUGES.

This was an account of some of the synthetic antifebrile substances which have been introduced into medicine within recent years, the information being obtained from Allen's "Commercial Organic Analysis." Predicating that febrifuges should contain nitrogen Mr. Davies divided them into four groups. First, *hydrazines*—viz., hydracetic and phenylhydrazine levulinate; second, *pyrazolones*, which include antipyrin and its salts; third, *aniline derivatives*, acetanilide, para-brom-acetanilide (antiseptin), methyl-acetanilide (exalgine), benzanilide, and euprophen; fourth, *phenol derivatives* such as phenacetin, methacetin and the kairins.

In proposing a vote of thanks to the lecturer for his lucid rendering of the subject, Mr. CONROY said that the great incentive to the discovery of artificial febrifuges—namely, the dearth of quinine—had now passed away, and the cheapness of that alkaloid rendered further investigation unnecessary except for purely scientific purposes.

CHEMISTS' ASSISTANTS' ASSOCIATION.

At last week's meeting a paper was read by Mr. H. A. D. JOWETT, B.Sc., on

PHARMACEUTICAL TRAINING, AS IT IS AND AS IT SHOULD BE.

Mr. Jowett's ideas of a typical pharmacist were that he should be a man who knows his business thoroughly, and possesses a knowledge not only of the various technicalities of his vocation, but of the principles of the sciences of which the many varied operations he is called upon to perform are applications—in fact, he should possess a thorough knowledge of both the theory and practice of pharmacy. He divided the period of time devoted to training into three parts—(1) apprenticeship, (2) study of the sciences on which pharmacy is based with a view to passing his qualifying examinations, and (3) the period after he is qualified and anterior to his commencing business for himself. As to apprenticeship he said that only a few learn their business systematically. Most frequently apprentices do not get time for study or recreation, and learn only that part of the business carried on in the shop, such as photographic work, oil and colours, cattle-medicine, and so on; very few indeed learn to dispense. In the second stage the general idea is to get the knowledge as quickly as possible, pass the Minor, and then go into business. Mr. Jowett thought this accounted for the number of failures in the Minor. After referring to other reasons which are accountable for the large percentage of failures, the author briefly commented upon the Major, and proceeded to speak of training as it should be. The pharmacist, he said, should have a good general education. As an apprentice he should learn as much as possible of the actual practice of pharmacy, gradually passing to more and more difficult operations as proficiency is acquired in the early stages. At the same time, the sciences bordering on pharmacy—viz., chemistry and botany—should be systematically studied, and he should apply this knowledge to elucidating the *rationale* of the different operations he performs. He should also have a good knowledge of the sciences of chemistry and botany,

certainly sufficient for him to pass the Minor examination with ease; and during the last year of apprenticeship attention should be paid to materia medica and pharmacy proper. Such a one will have no difficulty in passing the Minor, and this done he should extend his knowledge on the scientific side in some laboratory, and acquire proficiency in the operations required to be performed by the scientific pharmacist, and then pass the Major. Having thus acquired a thorough grounding in the sciences bordering on pharmacy, he has now to learn by experience as much as he can about the varied branches of pharmacy. He should become conversant with all that is required in the more scientific side of the business, such as technical analysis and manufacturing operations; he should also obtain experience in different localities, and always learning and using his powers of observation. He will thus be ready to become a master pharmacist himself, and with the knowledge and experience gained he is likely to become a successful man in business.

The PRESIDENT, in opening the discussion, said that the Pharmaceutical Preliminary should be abolished, and certificates of having passed recognised examinations of a better standard accepted in place of it. The South Kensington science classes were useful to everyone, and apprentices who had attended them always did better than those who had not when they began studying for the Minor. When men were well trained and qualified they always wished to go on to something else rather than go back into business. It was a great pity, but, the President continued, it very often was from want of a good business training, and, consequently, a Major man would become discouraged with business because he had few business ideas and no scope for his scientific knowledge.

Mr. TICKLE thought the London Matriculation examination should replace the Preliminary. He believed that it would be of great value if a youth could be taught technical subjects prior to his starting business, so that he might commence his apprenticeship with some knowledge of his work, and be permitted to undertake the various pharmaceutical operations instead of spending his time putting up stock.

Mr. DAVIES thought much improvement might be made in drawing up the indentures of apprenticeship, so that a youth might leave his master if he (the master) was found incompetent to teach him his business.

Mr. GARNETT agreed with the President's remarks, and thought much more ought to be done in introducing special clauses into indentures, and pharmacists ought to teach their apprentices the rudiments of the sciences connected with their business. He also thought the reason why well-trained men did not go back to retail business was that the work was uncongenial to them after their scientific training.

Messrs. HILL, R. H. JONES, CARE, GANE, MELHUISH, LONG and ROE continued the discussion, some of them speaking critically, and Mr. JOWETT replied.

Gazette.

PARTNERSHIPS DISSOLVED.

Addis, W., and Addis, R., Herbert Street, Hoxton, N., bone and ivory brush manufacturers, under the style of Messrs. William Addis & Son.

Clark, R., Melrose, J., and Scruton, S., York, wholesale chemists and druggists, under the style of Rahmes & Co.; so far as regards R. Clark.

Fordham, J. W., and Summers, T. C., Mile End Road, E., surgeons and apothecaries, under the style of Fordham & Summers.

Miller, F. D., and Stokes, F. A., Easingstoke, general medical practitioners, under the style of Miller & Stokes.

Plant, H., jun., and Trawford, J., Bloxwich, brush manufacturers, under the style of Plant & Trawford.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATIONS.

Clarke, Mary, Nottingham, ointment manufacturer.

Brown, William Alfred, Radford, late Nottingham, manager of brush business, until recently brush manufacturer.

Hendry, Richard (trading as Richard Hendry & Sons), Sunderland, shoemaker and glass-bottle manufacturer.

Marsden, Edward (trading as P. & E. Marsden), Bradford, soap-boiler and manufacturing chemist.

Sarjant, Josiah John, Leamington, surgeon.

Saunderson, Robert, Croydon, late Selhurst, near Croydon, registered medical practitioner.

Legal Reports.

THE LANOLINE CASE.

BENNO JAFFÉ & DARMSTAEDTER LANOLIN FABRIK v.
RICHARDSON & CO.

JUDGMENT.

In the Chancery Division of the High Court of Justice, on Saturday, December 16, judgment was given in this action, the hearing of which occupied the attention of the Court for seven days.

Mr. Justice Romer said: The patent the subject of this action is one for the manufacture of a product called lanoline from wool-fat. At the date of the patent it was well known that the wool of sheep contained fatty matters, but at that date, for all purposes of practical utility, these fatty matters were only being extracted and used in the following way. The wool was washed with an alkali, or an alkaline soap and water, so as to extract therefrom all the fatty matters and impurities, which of course remained in the wash-liquors, leaving the wool clean. These liquors were often referred to as waste liquors, because the main object of the washing was to clean the wool, and not to utilise the fats or impurities removed in the process. But at the date of the patent the waste liquors were not entirely wasted, but were utilised in the following way—and this was practically the only way in which they had been utilised for more than a century before that date. Acids were mixed with the liquors in the vessel containing them. The result of this was that the fats went to the top, and could be and were skimmed off and kneaded into a greasy substance. This substance was and is known as commercial wool-fat. It contained many impurities, some of which could be cleansed away more or less by washing, and then it would sometimes be called cleansed commercial wool-fat; but even this contained many impurities, it was darkish in colour, and liable to turn rancid, and had an unpleasant odour, was a coarse substance, which could only properly be used, and only was used, as a grease for railway-wheels, or for treating leather, or for other similar rough purposes. It could not be, and never was, used as an unguent or ointment, or for any pharmaceutical or medical purpose; and until lanoline was discovered, and put on the market after the invention the subject of the patent, no product of wool-fat was used or had been used for more than a century for pharmacy or for any medical purpose, or appeared or was referred to in any Pharmacopœia published since 1720. Moreover, the process by which this commercial wool-fat was produced was tedious and expensive, and liable to cause obnoxious smells, and a nuisance to the neighbourhood of the factory. Now, the product from wool-fat of "lanoline," which was discovered by the patentees, and the manufacture of which was patented, was for all practical purposes a new and very valuable product. Its utility is not in dispute. It is extremely valuable as an unguent or ointment, being almost colourless, inodorous and not liable to turn rancid. It is largely used in pharmacy, and can be usefully applied even to the mucous parts of the body. Its sale is very large and increasing, and it now appears in the Pharmacopœia, and is recognised in pharmacy and medicine as of useful and valuable preparation. Such an invention as this is a great merit, and, speaking for myself, I should approach the specification of such an invention with every wish, as far as I legitimately could, to uphold it, and not if possible to allow it to be invalidated by technicalities. What, then, was the invention which enabled this new product to be made? To appreciate that it is necessary for me to state shortly some of the properties of wool in its uncleansed state and its products. It contains, besides impurities of various kinds, two fatty matters—namely, fatty acids in various forms, which when mixed with an alkali form a soap, and cholesterolin fats, which are practically not capable of being turned into soap by alkali. So that when the wool is washed with an alkali or alkaline soap the liquor contains (1) cholesterolin fats, (2) soap, and (3) impurities, and these three constituents differ in specific gravity, the cholesterolin being the lightest. If to this liquor acids are added in the way adopted before this patent, the result is that the alkali is driven out of the soap, and the fatty acids set free rise to the

top together with the cholesterolin fats and some of the impurities, so that the fats skimmed off contain not only the cholesterolin, but the fatty acids mixed with impurities, and these go to form the ordinary commercial wool-fat. Now, the fatty acids are the cause of rancidity, and it was chiefly due to their presence in the commercial wool-fat that it had the defects I have before pointed out, and could be utilised only for the coarse purposes I have mentioned, and not in pharmacy or medicine. If the cholesterolin fats be freed from these fatty acids and the other impurities, then a product is obtained which, when kneaded and washed, is found to have a great capacity for taking up water with it, and to have the highly useful qualities I have before referred to under its name of lanoline. Now, the above properties of wool and its different constituents were for the first time fully ascertained and discovered by the inventors of the patented invention, and what they patented was the way by which (availing themselves of the properties they had discovered) the cholesterolin could be separated from the fatty acids and the impurities, and be worked up so as to make the lanoline. That way is seen to be a very simple one when once discovered and set forth; but with this, as with many other inventions of the highest importance, it does not follow that because it appears simple when discovered and explained it was obvious before or did not require invention, or is not of great merit and the proper subject of a patent. The contrary is the case here. Though many had previously sought a process whereby a better product might be obtained from wool-washings than the commercial wool-fat, no such process had, up to the date of this patent, been ascertained, and I gather that the inventors only discovered the new process after a long course of investigation and experiment. The new process, stated shortly, is this. Take the liquor (or lye, as it is sometimes called) coming from the wool-washings by alkali or alkaline soap. Refrain from acidulating it—that is, take the fresh undecomposed lye—and bearing in mind that the three ingredients (1) cholesterolin fats, (2) soap, and (3) impurities are of different specific gravity, separate them mechanically by the well-known best and quickest method—that is, by a centrifugal machine. Take the light cholesterolin fats or raw lanoline so separated, and knead it in cold water. Further purification can be applied by putting it in hot water (so separating the fat), and then putting the fat matter again through the centrifugal machine or dissolving the fat by a solvent and separating the solution by any of the well-known means. And the fat so cleansed is then again kneaded with water, and the product lanoline is obtained. The specification also points out that you can obtain the product from commercial wool-fat by treating the latter with an alkali so as to obtain a milky fluid which is equivalent to the fresh undecomposed lye, and can be treated accordingly. Now, from what I have stated it is clear that no objection could be properly made to this patent either on the ground that the invention patented was not useful, or on the ground that it was not new or not good subject-matter. What additional fact, then, have the defendants to rely upon to support an objection on any of the above grounds? Substantially nothing but this. It appears that the Greeks were aware, and Dioscorides pointed out, that from wool could be obtained (by washing it in hot water) some of its grease, and that if this grease were collected and washed repeatedly in water, a substance called "œsypus" could be obtained, which was useful in certain cases as an unguent. But so far as the process can be ascertained from the known editions of Dioscorides or the treatises of persons acquainted with his writings or with this œsypus, it is clear that it could not produce lanoline; nor would any person acquainted with such process as described have been naturally led to discover lanoline. For, amongst other reasons, not a word is said in the descriptions of the process about any alkali being used, and from what I have stated above it is clear that without it no lanoline could be produced. Washings in water, if repeated often enough, will remove some of the more soluble of the fatty acids, but will not remove all, some of those fatty acids not being soluble in water. And, indeed, from the description of this œsypus set forth in the published works on the subject put in evidence by the defendants, it appears to me it had not the properties of lanoline. In addition, œsypus was practically unknown as a product for many years before this patent, and when, in fact, it was last used no one knows

It was last referred to in any Pharmacopœia in the year 1720. Doubtless it was cast aside because not practically useful. Some experts for the defendants say now that they have produced a more or less satisfactory ointment by following Dioscorides' directions; but Professor Atfield stated that he only learnt how to work Dioscorides' process gradually, and by the aid of three or four experiments, from which one can well infer what would have happened to any persons less skilled than he if they had tried to make a product like lanoline merely from what Dioscorides had taught. All I need say, in conclusion on this part of the case, is that if any person can produce a useful article by merely following the directions of Dioscorides he is at liberty to do so notwithstanding the patent; but I doubt if he can do so, and certainly it cannot be said that those directions are an anticipation of this patent, or deprive the inventors of the merits of their invention, or prevent the Court from saying that the invention was new and good subject-matter for a patent and of great value. This disposes of all substantial objections to the patent. As is not unusual in patent-cases, numerous objections were taken of a technical and petty description, which greatly increased the expense of the action and the time required to decide it, and yet when threshed out were found of no avail. All these were abandoned except one, which I must briefly notice. It is a typical instance. As one of the alternative processes for further purification of raw lanoline referred to in the specification is dissolution by a solvent, and amongst other solvents mentioned is methylated spirit. The defendants lay hold of this, and say it is not a useful solvent, as, though it may dissolve impurities, and so be useful as a purifier, it does not dissolve, except with difficulty, the pure cholesterol fats, and they say that according to the strict wording of the specification a person would gather that all the raw lanoline is intended to be dissolved. But, in the first place, I am satisfied on the evidence that the persons to whom the specification is addressed would readily gather from it that such solvent referred to is to be used as a purifier according to its known properties, and would not imagine that in every case it was essential to dissolve the whole of the raw lanoline. In the second place, the defendants' witnesses on the subject appear never to have tried methylated spirit on raw lanoline, and on the evidence as a whole I am satisfied that it can be used usefully on occasions as a solvent purifier on raw lanoline, though it may not be always so efficacious as some of the other solvents mentioned in the specification. The result is I hold the patent to be good. The only remaining question is as to infringement, bearing in mind that the patent is a claim for the making of lanoline and does not separately claim the product itself. Now, admittedly, what the defendants are selling under the name of anaspaline is (putting aside an immaterial ingredient) merely lanoline. The question is, how is it made? Treating, as I am entitled to do for this purpose, the defendants and the manufacturers from whom they buy their unfinished products as one person, the defendants' process of manufacture may be shortly stated thus. They adopt in substance the whole process of the patent, the only difference in the form of the process being that instead of mechanically separating the fresh undecomposed lye procured by alkali-washing by the centrifugal machine, they separate it mechanically by letting the lye rest in a vessel, so that the lighter portion, being the cholesterol fat, goes to the top, and then they skim that off and work it. Does this enable the defendants to say that they have not infringed the patent? I think not. They appear to me to have taken the essence, or what is sometimes called the pith and marrow, of the invention. The use of the centrifugal machine was not of the essence of the patented invention. That machine was a well-known method of separating mechanically materials of different specific gravity, and was to my mind referred to in the specification as being, and because it was, the most speedy and efficient known means for effecting the separation. The mechanical separation by allowing gravity to act on such materials when deposited in a vessel in the ordinary way is a well-known equivalent, though not so speedy or efficacious, and the defendants cannot by adopting this, when they on all essential matters take the plaintiffs' invention, be heard to say they are not using the invention or infringing the patent.

It follows that the plaintiffs are entitled to the usual relief against the defendants as infringers.

Sir Richard Webster: Then, my Lord, I ask for an injunction, and I elect to have damages in preference to profits.

Mr. Justice Romer: Yes.

Sir R. Webster: I ask for a certificate that the validity of the patent came in question under the statute.

Mr. Justice Romer: Yes.

Sir R. Webster: And also that we have proved our Particulars of Breaches.

Mr. Justice Romer: Yes.

Sir R. Webster: And I ask your Lordship for the costs of the shorthand notes, which have been of considerable assistance.

Mr. Justice Romer: Has there been any arrangement as to that?

Sir Richard Webster: Yes, my Lord, I am told that has been arranged. I do not know whether I can ask for costs on the higher scale.

Mr. Justice Romer: I do not think so.

VINEGAR-MAKERS AT WAR.

THE action brought by Messrs. Champion & Co., vinegar-makers, of the City Road, London, against the Birmingham Vinegar-brewery Company, to recover damages for alleged slander and libel, came before Lord Chief Justice Coleridge and Mr. Justice Collins, sitting as a Divisional Court of the Queen's Bench, on Friday last. The parties are rival vinegar-makers, and the matter came before the Court in the form of an appeal by the defendants against an interim injunction granted by Mr. Justice Bruce restraining the defendants and their agents from continuing to publish the statements complained of.

Mr. Blake Odgers, Q.C., and Mr. Younger appeared for defendants in support of the appeal, while Sir Edward Clarke, Q.C., and Mr. Lewis Coward represented the plaintiffs, and supported the injunction.

The libels which the plaintiffs sought to repress, and which formed the subject-matter of the action, were three in number, and were handbills which purported to be extracts from articles published in certain trade journals. The first was headed "Champion's Vinegar in Court" and went on to say:—

At the South Shields Petty Sessions a grocer of Hebburn-on-Tyne was charged with selling vinegar which had been adulterated to the extent of 20 per cent. . . . The vinegar had been received from Messrs. Champion. The case having been adjourned for Messrs. Champion to make an analysis, they wired—"Sample examined is a perfectly pure and excellent vinegar made from grain and malted barley. There must be a mistake on the part of the analyst. We welcome most heartily the attacks of analysts upon acid-made vinegars. . . . As sellers in bulk we are advised that we cannot be expected to defend a case of this kind." The Bench observed that it was evident Messrs. Champion did not desire to defend the charge, and it was most unfair that the disgrace should be visited upon retail dealers when it really belonged to the manufacturing firm. A fine of 5s. and costs was imposed.

The publication of this report on slips was what the plaintiffs complained of.

Mr. Odgers in supporting the appeal said there was no suggestion that any part of the report was false. The plaintiffs had alleged that the analyst was wrong, and that there was no pyroligneous acid in their vinegar. Mr. Bigwood, managing director of Champion & Co., had been interviewed by a journalist and asked, "If you were of opinion that your vinegar was above reproach, and that the analyst was wrong, would it not have been wiser to send down your own analyst to defend the case before the Magistrates?" Mr. Bigwood, in answer, said, "Judging by the event, it would have been better to have sent down, but we relied upon the high repute and well-known quality of all goods sent out by us." The learned counsel urged the Court to take the view that the publication was fair and accurate comment upon Messrs. Champion's conduct in not coming forward and taking up the defence when the quality of their vinegar was called in question.

Sir E. Clarke said the dissolving of this injunction might act as a sort of licence to the persons who had these handbills, and encourage them to circulate them. The injunction would have been unnecessary if the defendants would undertake to stop the circulation of the libels.

The Lord Chief Justice held that a judge should be absolutely satisfied before granting an interim injunction that wrong had been done. In this case he (Lord Coleridge) was not by any means certain that when the case came before a jury, there could not be justification in point of fact, or justification on the ground that the occasions of publication were privileged. Therefore, this injunction must be dissolved.

Mr. Justice Collins, in concurring, said the plaintiffs could not contend that the occasions of publication were not privileged, and therefore, it would be for the jury to say whether the privilege had been abused. There was a reasonable possibility that the jury might find for the defendants, and therefore, the injunction ought not to have been granted. Injunction dissolved accordingly.

ALUM IN BAKING-POWDERS.

MR. JUSTICE HAWKINS and Mr. Justices Lawrance, sitting as a Divisional Court of the Queen's Bench, on Monday last, heard an appeal under the Sale of Food and Drugs Act. The appellant was James James, a Welsh grocer, who was convicted in February last for selling baking-powder mixed with 40 per cent. of alum, and was fined 2*l.* with 17*l.* 19*s.* 6*d.* for costs. The respondent was an inspector appointed under the Act.

Sir Richard Webster, Q.C., Mr. Brynmor Jones, Q.C., and Mr. MacMorran were counsel for the appellant; Mr. Finlay, Q.C., and Mr. Rhys supported the conviction.

Sir Richard Webster said the Justices of Blaenrhondda, in the county of Glamorgan, convicted the appellant on February 15, and he appealed to the Quarter Sessions at Swansea, but that court upheld the conviction. On December 10, 1892, the appellant sold to the respondent a packet of baking-powder weighing about 1 oz. for one penny. The baking-powder was composed of the following ingredients:—Bicarbonate of soda, 20 per cent.; alum, 40 per cent.; and ground rice, 40 per cent. This baking-powder, called "Excelsior," had been sold for many years and was used in the process of making bread, cakes, and pastry. In order to cause the mixture of flour and water of which bread, cakes, and pastry were composed to rise and become light and digestible when baked it was necessary that a certain quantity of carbonic-acid gas should be generated and diffused through the dough. The gas might be evolved by the growth of yeast or by baking-powder. Bicarbonate of soda was contained in the baking-powder and carbonic-acid gas was contained in the bicarbonate of soda. In order to liberate this gas and cause it to permeate the dough there must be a chemical combination of an acid of some kind with the bicarbonate of soda, which substances, when dissolved in water or in the moisture of the dough produced by water, combined, and the liberation of the gas was effected. The acid used in the best known baking-powders was tartaric acid, which was not injurious to health. Ground rice was added to the bicarbonate of soda and alum for the purpose of preserving the compound from injury and damp and preventing chemical combination before actual use in the dough. The ground rice remained with the alum in the form of hydrate of alumina in the bread, and both passed into the human system. The learned counsel proceeded to argue that baking-powder was not an article of food within the Food and Drugs Act. The Act was not a statute for enforcing the purity of chemicals used for a particular purpose. It was a penal statute, and therefore must be construed strictly. Making baking-powder in this way was not an offence against the Act. The section which gave a definition of the term "food" said "the term food shall include every article used for food or drink by man other than drugs or water." The appellant in this case was not indicted for mixing anything with any food, nor for selling any article of food not of the substance and quality of the article demanded by the purchaser. If the appellant was liable at all it must be for having sold an article of food. But baking-powder was not an article of food. Nobody ever eats baking-powder. On these packets were directions for mixing one teaspoonful with a pound of flour. This baking-powder was merely a substitute for yeast, and had been on the market for years. As no article of food had been sold or adulterated, he submitted that the conviction was wrong, and must be quashed.

Mr. Finlay, in opposing the appeal, said that if Sir R.

Webster's view was correct, further legislation with regard to the sale of food and drugs was urgently demanded, because it imputed that the legislature had passed an Act which was utterly useless to protect the public. At the trial some eminent experts gave evidence, and the Court was satisfied upon that evidence that alum was injurious to health. Was not baking-powder an article of food? When the words of the defining section in the Act were examined, it was impossible to avoid the conclusion that it was "Food" included every article used for food or drink by man, other than drugs or water. His learned opponent argued that these words meant only articles which were used in their separate condition. Was not flour an article of food? No one would ever eat flour. According to Sir R. Webster flour was not food. His learned friend would also say oil was not food, because nobody ever drank oil except castor oil. (Laughter.)

Sir R. Webster: Salad oil.

Mr. Finlay: Does my friend drink the oil first and eat the salad afterwards? Then is not pepper an article of food? But I do not think the hungriest man would fill his stomach with pepper alone. (Laughter.)

Mr. Justice Hawkins: I have heard of meat pies being made of nothing but air and pepper.

Mr. Finlay thought that such a fiery article of diet would be relished only by the strongest and best-seasoned stomachs. (Laughter.) Following the same argument, salt would not be an article of food, and even corn itself would be excluded. These examples were enough to show that Sir R. Webster's contention was absurd. This case had been decided upon fact, not law, and the finding of the Court below was enough to show that baking-powder was an article of food. It was an article of food just as much as oil, salt, pepper, and flour. If the appellant's contention was upheld, no one could be convicted of putting sand or powdered glass into salt or pepper. Baking-powder was clearly used for food by man, and the magistrates found that it was eaten mixed with the bread.

Mr. Justice Hawkins: Is brimstone an article of food?

Mr. Finlay suggested that it would be a drug.

Sir R. Webster: Oh, no. Mr. Squeers did not use it like that at Dotheboys Hall. (Laughter.)

Mr. Justice Hawkins: It is a deleterious compound mixed with treacle.

Mr. Finlay: I have never experimented upon it, so I cannot say. But I submit Mr. Squeers most certainly might have been convicted under this statute, if it had been in force in his day, for supplying to his boys for remuneration this mixture of treacle—which is an article of food—with brimstone, which is deleterious to health. If my friend by his eloquence as an advocate succeeds here to-day, I am quite sure he will, as a legislator, be equally eloquent in Parliament for the purpose of altering what his pleading has brought about. But he cannot succeed, because this baking-powder is clearly within the Act, and the conviction must be upheld.

Mr. Justice Hawkins: As the matter is of such importance and general interest, we will take time to prepare our judgment.

ANOTHER VINEGAR-CASE DISMISSED.

At South Shields Petty Sessions, on Tuesday, Daniel Sharpe, grocer, Hebburn, was charged on remand with selling adulterated vinegar. At the previous hearing of the case the certificate of the county analyst stated that the vinegar only contained 60 per cent. of malt vinegar, and the other 40 per cent. was derived from other sources. Mr. Neil, who appeared for the defendant and for the makers, then asked that the sample be submitted to Somerset House, and the case was adjourned for this purpose. This certificate was now read. It stated that the sample was pure commercial malt vinegar.

Mr. Iliff (for the prosecution) asked for another adjournment so as to bring evidence in support of the original certificate. This the Bench refused, but Mr. Stock, public analyst, was called, and stated that he adhered to his certificate. In his opinion the certificate of the Somerset House authorities was not correct.

Mr. Neil said the vinegar which was sold by the defendants was sold to them with a written certificate stating that it

was pure malt vinegar. The vinegar had been sold for the past 150 years, and Mr. Stock was the first public analyst to discover that it was not the correct article. It had stood the test at Somerset House, and he contended that the case should fail.

Mr. Francis Sutton, county analyst for Norfolk, said that, in his opinion, the sample was pure malt vinegar. It was not possible to make vinegar of a purer nature.

The Bench, after retiring, determined to dismiss the case, and another on the same lines, with costs, which they fixed at 14*l.* 14*s.*

COUNTY COURT CASES.

Veterinary-medicine Agency.

At Leeds County Court, on December 14, before Judge Greenhow, Alfred Preston, of Thorner, was sued by Thomas Markham, trading as the Stud Veterinary-medicine Company, of Leeds, to recover the sum of 2*l.* 4*s.* 4*d.* Plaintiff said that Preston took medicines, and agreed to act as agent for the sale of same in Thorner. That was in May last. On July 19 defendant wrote saying he had been unable to sell any of the goods, and asked plaintiff to take back part of them, promising to be responsible for the remainder. The defendant said plaintiff brought great pressure to bear upon him to take up the agency and promised not to appoint another agent in the district, but subsequently appointed others in neighbouring villages. The plaintiff said he only undertook to give the defendant the sole agency for Thorner. His Honour gave judgment for the plaintiff without costs.

Mr. Fernando's Debts.

THE case of Rogers *v.* Fernando came before Judge Lumley Smith on Tuesday in the Westminster County Court. The defendant said he had several judgments against him. He had turned his chemist's business into a limited company, and he received 100*l.* a year. He had five times broken a blood-vessel that year, and had only got up to come to the court. He had a wife and two children. Plaintiff's solicitor asked for a committal, because he would be unable to get his money without. He did not mind how long it was suspended as long as the order was made. His Honour made an order for 1*l.* a month. Plaintiff's Solicitor: That only means that I shall have to come here every month. His Honour: You need not unless you like.

Messrs. Savory & Moore's Claim.

THE case of Savory & Moore *v.* Armitage, which was reported last week, was again before Judge Lumley Smith in the Westminster County Court on Monday, when an application was made on behalf of the plaintiffs for the payment out of court of the debt and costs. On the previous Thursday the defendant applied for a new trial on the ground that he was not personally liable for the debt in respect of which judgment had been obtained. The application was granted on condition that the debt and costs should be paid into court. Plaintiff's solicitor now said the debt and costs had been paid into court, with an admission of liability, and he asked that the monies should be paid to the plaintiffs, together with the costs of that day's application. His Honour ordered payment out of the money in court, but declined to allow costs of the application for the withdrawal of the money.

An Analytical Chemist Summoned.

ON Tuesday, before the Assistant Judge, in the Lord Mayor's Court, Messrs. A. B. Parr & Co. summoned Charles Inger, on a judgment summons, to show cause in regard to a claim of 13*l.* 8*s.* for which judgment had been obtained. It was said, for the plaintiffs, that the defendant carried on the business of an analytical chemist at 60 Watling Street, but the witness was unable to say whether the defendant kept any assistants. An order was eventually made against the defendant, who did not appear, for the payment of 1*l.* a month.

A Wife's Liability.

IN the City of London Court, on December 15, before Mr. Commissioner Kerr, Messrs. Deutschmann & Co., druggists' sundriesmen, 101 Leadenhall Street, E.C., sought to recover 7*l.* 3*s.* 10*d.* for essences, perfumes, gelatine, &c., supplied to

Mr. C. Meacham, 22 St. Peter's Road, Great Yarmouth. The case had been before the Court on a previous occasion, when Mr. Commissioner Kerr made an order that the defendant's wife should be added as a co-defendant. This had not been done by the plaintiffs.

The defendant's wife said the goods were supplied to her, the business being her property. Since 1891 she had been carrying on the business, owing to her husband's bankruptcy. The plaintiffs' traveller who took the order said he sold the goods to the defendant, and not to his wife. Mrs. Meacham contradicted this.

Mr. Commissioner Kerr said the goods were evidently supplied to the defendant's wife. He had told the plaintiffs to add her as a co-defendant, so that he might get at the truth, and give judgment against the right person. As the plaintiffs had not done that, he must find for the defendant. The plaintiffs could bring another action against the wife, and in that way get their money.

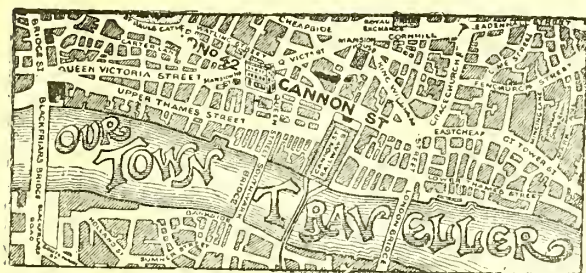
Judgment was accordingly entered for the defendant.

WILLS.

SIR ANDREW CLARK, BART., M.D., has left personal estate in the United Kingdom valued at 203,969*l.* He bequeaths to his wife the whole household furniture, books, pictures, plate, and effects in both his London and country houses, together with the interest on 20,000*l.*, and the use of the estate of Camfield during her life. At her death the estate is given to his second son, Mr. Andrew Gladstone Clark. The trustees are directed to appropriate the sum of 80,000*l.* as an endowment for the baronetcy, now held by his son by his first marriage, Surgeon Colonel Sir James Clark, and to hold the residue of the estate upon trusts for the benefit of the testator's remaining children other than the baronet.

THE will, dated February 11, 1892, of the late Mr. William Kilner, of 16 Alexandra Villas, Finsbury Park, N., glass-bottle manufacturer, has been proved by Mr. George William Kilner, Mr. Jas. Richard Kilner, and Mr. Frederick Kilner, sons and executors of the testator (who died on August 17 last). The gross value of the personality amounted to 90,233*l.* 13*s.* 10*d.*, and the net value to 89,814*l.* 16*s.* 7*d.* The testator leaves to his widow the use of his house and furniture and the interest upon 10,000*l.*, and 60 volumes of his books. He bequeaths immediate legacies of 200*l.* to his widow and to his children John Caleb, Arthur Piercy, and Mary Alice, and leaves the residue of his library among his children equally. To his daughter Mary Alice the testator bequeaths 10,000*l.*, and to his sons John Caleb and Arthur Piercy 14,000*l.* each, to be paid in twenty half-yearly instalments. The residue of his property he leaves to his sons George William, James Richard, and Frederick.

MR. JOHN MAY, of Hyde House, Old Battersea, of the firm of Messrs. May & Baker, manufacturing chemists, Battersea, who died on November 7, 1893, has left gross personality to the value of 26,018*l.* 5*s.* 3*d.*, the net amount upon which the probate-duty is levied being 25,940*l.* 9*s.* 5*d.* By his will, dated January 31, 1891, which has just been proved at the Principal Registry, the testator appoints his nephew Captain John Rolfe Nelson Moss, of the Royal Navy, and his friend Mr. W. E. B. Blekinsop, manufacturing chemist, of Battersea, his executors and trustees. The testator expresses a desire to be buried at Plymouth with his niece Caroline Moss. He recites that, being possessed of considerable personal property, he desires his executors to realise it and to pay legacies of 4,000*l.* to his said nephew, Captain J. R. N. Moss, 3,000*l.* each to his nephew Captain John Aylen, R.N., his niece Miss Eliza Moss, and his niece Minnie, the wife of the Rev. W. Addison, and 3,000*l.* for the benefit of the children of his nephew Clarence Aylen, which bequest is to take precedence of other legacies. The testator bequeaths 25*l.* each to his late partner, Mr. Baker, and to Mr. Tyrer, and legacies to various relations and servants. The residue of his estate the testator leaves to his nephew Captain John R. Nelson Moss. By a codicil dated November 4 last the testator appoints Mr. Henry Haynes, of 26 Portsdown Road, Paddington, executor and trustee in place of Mr. W. E. B. Blekinsop.



A WALK through West-end streets any afternoon at this season is a liberal education. Business for a long time—that is, since the Royal marriage—has been at a very low ebb. Now the advent of Christmas is cheering things up a bit, and although Bond Street is not overcrowded it is sufficiently bright and gay to warrant a stroll there. When I came to Messrs. ROBERTS & Co.'s pharmacy the evidence of brisk business within and without sufficed to keep me outside. I managed to shake hands with Mr. Pearce, of Messrs. KEENE & ASHWELL, who told me that the wholesale trade is in a healthy condition. As to the retail, well, I thought that if I could pass an afternoon in this homoeopathic pharmacy I would soon know how many of the aristocrats are homoeopaths, for during the brief chat with Mr. Pearce about half-a-dozen footmen dropped in, and at least one noble lady in her carriage had to be attended to. On the west corner of Brook Street and Bond Street

ROSS & Co., THE OPTICIANS,

have erected a very handsome building, two floors of which they occupy for business purposes. There are windows to both streets, and the shop is as handsome a one as there is in that elegant quarter. I had the privilege of seeing the first of a new students' microscope which the firm are putting on the market. It is called the "Eclipse," and may be said to be the outcome of a demand created by the Chicago Exhibition, for orders for an educational instrument came from World's Fair visitors, and the first dozen will be despatched to the United States. The photographic craze has put microscopy very much in the background of recent years. Formerly the microscope was a popular hobby amongst scientific amateurs, and there was a good demand for high-class instruments. That has nearly all gone now, and the money that was spent on microscopes is spent on cameras and lenses. Educational institutions are the principal customers for microscopes, and the "Eclipse" has been constructed to meet the demand by them. Messrs. Ross & Co. have for years been devoting the greater part of their works to the production of photographic lenses and apparatus, and they have reached a degree of perfection which is creditable to English art. In the manufacture of lenses they go upon strictly scientific lines, and if any finished lens does not conform exactly with the mathematical formula of its class it is destroyed.

"No. 4711."

The number which is becoming so familiar in England attracted me into the Bond Street eau de Cologne shop (No. 62) to ask Mr. Reuter how FREDK. MÜHLENS' goods are taking with us. "Splendidly," was the laconic yet emphatic response, and Mr. Reuter backed it up with some telling figures of accounts opened and business done. "Of course," he said, "we cannot pretend to satisfy those who want low quality and low-priced eau de Cologne and perfumes, but chemists who have a good class of customers increase their orders every time. Mr. ——— commenced with two dozen; our last account with him was about 60l." Mr. Reuter stated further that Mr. Mühlens' soaps are taking well, and he handed me for inspection a box of rose soap of the "Natural Flower" series—a delicious and pure soap of delightful odour. At the beginning of the year he will be introducing to the English market a series of cheap toilet-soaps, free from cocoanut oil or any other objectionable fats, and practically neutral. The shapes of the samples which I saw were pretty and novel—in fact, I have not seen them before except in high-priced soaps. They will be supplied in three-dozen boxes,

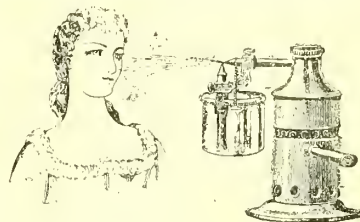
with or without the name of the retailer, and on an order for 10 cwt. no charge is made for the die. The soaps are made in Germany, but they are stamped "Manufactured in Cologne," which is as good as a recommendation, yet complies with the requirements of the Merchandise Marks Act. Although it is past the eleventh hour for Christmas trade, I may mention a neat yet simple way of doing up eau de Cologne which I noticed. It is to wrap a half-dozen case in white demy, and tie it round with pink or blue silk ribbon $\frac{1}{2}$ inch wide. Mr. Reuter slips in a coloured cabinet photo—a Swiss girl—as a souvenir, which adds to the attraction, but the white demy and silk ribbon finish off the case excellently.

OLEUM RUSCI AND RUSSIA LEATHER.

Passing along Conduit Street, I dropped into GODFREY & COOKE's pharmacy, now owned by Mr. Thomas Greenish, who was an assistant in the same shop nearly half-a-century ago. There is such a craze nowadays for Russia-leather goods that I thought Mr. Greenish might be able to tell me something about the famous tar, oleum rusci, the use of which as a currying-oil gives the peculiar odour to real Russia leather. In these degenerate days there is very little Russia leather that is real. Most of it never formed the integument of the horse, or saw Russia, but is kid or calfskin, scented with the essential oil distilled from oleum rusci. There is a demand for a scent which will give the Russia-leather odour to kid gloves, and for this purpose Mr. Greenish suggests that the oleum rusci should be mixed with the French chalk used for dusting the gloves. This he finds works very well. Mr. Greenish was the first to bring oleum rusci to this country. When he attended the International Congress at St. Petersburg he got a pound of it from a pharmacist who came from the interior of Russia. He brought it under the notice of dermatologists whom he knows here, and it has been found an excellent remedy for certain skin-diseases. At first it was feared that the Russian Government would prohibit the export of the tar, but Mr. Greenish has never found difficulty in that direction, although the quantities he has required have gone on increasing. There are many kinds of things sold as oleum rusci, but I am not aware of any which is the real thing for skin-diseases except the thick greenish-like tar which Mr. Greenish imports. The limpid brownish liquids more resemble wood-tar oil than the birch-tar so well known in Russia.

PARISIAN VAPORISER.

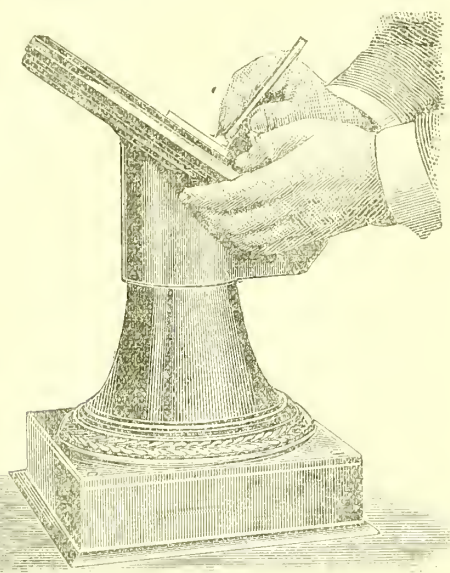
Nearer the hum of Regent Street the FRENCH HYGIENIC SOCIETY have their premises (6 Conduit Street), and there I entered to inspect one of the means used by beautiful women for preserving their complexions. This is the patent steam atomiser, a pretty nickel-plated vessel, containing a boiler, spirit-lamp, and spray-producer. A beakerful of water is put



into the boiler, the top put on, and the beaker containing eau de lis, or other preparation, is hung on as shown, and when the water comes to the boil the steam carries with it a spray of eau de lis, the mixture having a pleasant temperature and delicious effect upon the skin. The atomiser may be used for medical purposes also, or for spraying perfume, but it is as a complexion-preserver that it is chiefly used. Fifteen minutes use at bedtime, twice a week, is the prescription for keeping the skin soft and warding off wrinkles.

THE UNIVERSAL CASH-REGISTER COMPANY (LIMITED), of 11 QUEEN VICTORIA STREET, E.C., are putting upon the market two cash-registers of different types. The "Champion" machine is represented in the figure as it stands while an entry is being made. In making such entry the vendor or assistant turns the dial (which moves on a pivot about the centre of the upright column) round to face him. Having entered the amount in the space to the left of the dial, he releases the machine, which automatically swings back into its forme

position facing the purchaser, this latter movement also causing the recorded amount to pass under the glass which covers the greater part of the before-mentioned space, making it impossible of alteration. The machine occupies



only 9 square inches of counter-space, and will record 75 entries before requiring a new entry-sheet. In the "Invincible" machine, a separate chamber is provided for each coin of the realm, and being placed on the counter in front of the purchaser the amount paid can at once be checked. The customer sees only the amount of his particular purchase as the shopman must, between the receipts of money,

press the stop at the back of the register, which empties all the chambers into the cash-drawer below. The small counter-space which the machines occupy will no doubt appeal to chemists. Both machines are manufactured by Avery & Co. (Limited.)

This company are also making what they designate as an "Exhibiting Column." This is for the purpose of showing goods in pyramid or column style, and may be used for window, counter, shop, or outdoor display. The model column is made with a circular base, from which springs a centre rod fitted with movable wooden discs which can be raised or lowered to the height of the bottle or article to be

shown. When the first set of articles is placed round the base one of these discs is fitted on, thus locking them together, and at the same time providing a platform for the second stage, and so on to any height, the whole being surmounted by a simple screw arrangement which locks the exhibit together so firmly that it can be moved about like an ordinary showcase.

FROM THE SUNNY SOUTH.

About the month of October, when, as a French poet remarks,

Cybèle a clos ses amours de l'année,

a number of representative French essential-oil distillers are in the habit of paying a visit to this country, which, in spite of its many shortcomings, is appreciated by the foreigner as one of the best markets in the world for the sale of his goods. With one of these gentlemen—M. Andrioli, of the

firm of SOZIO & ANDRIOLI, of Grasse—our Town Traveler recently had an interesting chat. M. Andrioli is an Italian by birth and a trained pharmacist. He has exercised the pharmaceutical craft in his native country and in Germany, speaks half-a-dozen languages with remarkable fluency, and (since he became Mr. Sozio's partner in the essential-oil business) has travelled over half the world selling the firm's essences and pommades.

"The present year has been a very good one for lavender in the South," said M. Andrioli, "but a middling one only for rosemary and thyme. In our district the plants have yielded a smaller percentage of essential oil than usual, but the quality has been very fine. Geraniums have given a very good crop, but pennyroyal has been a failure."

"Is the essential-oil industry still extending in the South of France?"

"Very largely, indeed. I should think that within the last ten years alone the area under cultivation for essential oils in France has trebled, and that in spite of the fact that in Algeria, in Spain, and in some other parts the industry has also made great progress. The geranium-culture, however, which was the chief occupation of the Algerian distillers, is becoming less and less important in that colony every year, chiefly because the production of the island of Réunion in the Indian Ocean has taken away many customers from Algeria. But Réunion in its turn is beginning to abandon the culture, as it has ceased to pay. The French geranium oil, however, is far and away the best, and, so far as really high-class trade is concerned, neither Algeria nor Réunion can do us much harm. In Spain, by the way, the cultivation of essential-oil plants has become an industry of some importance lately. As you know, a large number of fragrant oil yielding herbs grow wild on the plateau of Southern Spain, those bleak regions which Doré drew so well; but their oil is not available, as the districts where they grow are almost uninhabited, and it would not pay to carry portable stills to the distilling-grounds as we do in the French Alps. But even in our own country quite a third part of the wild lavender and thyme are never distilled because they grow on hills that are almost inaccessible. Pennyroyal, peppermint, lavender, and geranium, however, have been cultivated to some extent in the south and east of Spain lately. Spanish geranium oil ranks next to French, which is largely used by soapmakers, usually mixed with patchouly and clove oil, to bring out the odour. The cultivation of wormwood, of which the oil is used in absinthe-making, is declining very considerably. Formerly wormwood oil was in great demand in Holland and Germany, where it was used as an ingredient in some popular bitters, but of late those customers have bought from us much less than before."

"Who was the originator of the French essential-oil industry?"

"I have forgotten his name," said M. Andrioli, "but he was a countryman of mine, from Florence, and he settled in France in 1640—at least, that is the year when his product—orange-flower water—was first brought into trade; and for many years that water was the only perfume made. Beaucaire Fair was the chief mart for the perfume, and you can form some idea of the importance of the industry when I tell you that even in its early days from 400 to 500 coppers were annually brought for sale here and sold to the last piece. After that came pommade-making, the pommades being put up in 1-oz. and 2-oz. pots and used in the natural state. The English were the first to use these pommades (which were then made by simply mixing up oil and grease in a box), and the present state of advancement of the industry only dates from forty to fifty years back."

SIR WILFRID LAWSON tells a new story about a quack doctor. This practitioner, he says, had perfected a process for washing people's brains, taking them out from the skull and returning them, "while you wait." One day a brain was being washed in the back shop, and when the doctor brought it back, cleaned, to refit, he found to his dismay that the customer had departed. A few days later he met him in the street. "Ah, my dear fellow," he said, "I am so glad to have found you. Do you know you went away the other day without your brains?" "Oh did I; well, it's of no consequence; since I saw you I have got a Government appointment."

REVIEWS

Sciatic Neuritis. By ROBERT SIMPSON, L.R.C.P., &c.
Bristol: John Wright & Co.

THIS is a book about sciatica, here dignified into sciatic neuritis. Why? Sciatica is a good name—sanctioned by its use in the classics of medicine, convenient, euphonious, and everywhere understood. No doubt a change of name is sometimes necessary, but in these days, when scientific nomenclature has grown to such appalling dimensions, any useless reduplication of terms is little less than an unpardonable sin. The author deals chiefly with the pathology and treatment of the disease. He assumes—as, indeed, do most recent writers on the subject—that the symptoms arise from an inflammation of the nerve. That this is always so we cannot admit to be fully proved. Indeed, there are facts which point quite in the opposite direction. The paralysis, for example, which occurs where nerves are really inflamed is never or almost never seen in sciatica.

In regard to the treatment the author's main object is to advocate the use of massage, and here we are heartily at one with him. Whether the massage produces its effects by promoting the flow of blood and clearing away effete material or by some other method we do not know, but we do know from experience that when skilfully and systematically applied it produces most favourable results. This also has been the author's experience, and what he has to say about the method and its results is worth the attention of those who are interested in the cure of this troublesome complaint.

Modern Household Medicine. A Guide to the Mode of Recognition and the Rational Treatment of Diseases and Emergencies Incidental to Daily Life. By CHARLES ROBERT FLEURY, M.D. Third Edition. London, 1893: E. Gould & Son. 8vo. Pp. xvi. + 712.

If there is anything that homœopaths are fairly entitled to, it is credit for beating allopaths in the production of useful books on household medicine. The volume before us is one of many which living homœopathic physicians—leaders in that cult—have written; but when we turn to allopathy we can find no one of eminence who has spontaneously ventured to write for the benefit of the public such a manual as Dr. Fleury's. Dr. Warburton Begbie did something of the kind, but so strong is the prejudice in the allopathic school against popularising medicine that his work was anonymous while he lived; and although it has not been revised since his death, it remains an exceedingly popular book. Apart from it, popular medical books are the outcome of publishing enterprise rather than medical willingness, and we suppose this condition will continue while the medical profession is tied down by antiquated notions of what is proper in the way of publicity. All this, however, is apart from Dr. Fleury's book. In all respects except treatment—and that we must consider debatable—it is an excellent manual, giving just those particulars regarding diseases which people want to know, and there are in it many useful chapters comprising general information, directions as to dietary, &c. We cannot, however, agree as to the wisdom of including such things as venereal affections in a book of domestic medicine.

Syphilis. By EDWARD COTTERELL, F.R.C.S., &c. London: John Bale & Sons.

THIS is a dainty little volume got up in a style that would by no means disgrace one of the "minor poets," and on opening the covers it is with almost a shock that one finds the title "Syphilis: Its Treatment by Intramuscular Injections of Soluble Mercurial Salts." But the subject, although far removed from the poetic muse is none the less interesting, and certainly it is of great practical importance.

Syphilis is of all diseases one of the easiest to treat, also it is one of the most difficult. It is easy because in mercury we have a true specific which neutralises and eventually destroys the virus of the disease. It is difficult because the virus cannot be completely eradicated from the system with-

out a thorough and prolonged course of the drug, and while on the one hand it is almost impossible to get some patients to continue month after month taking their regular daily doses, others from some unexplained constitutional peculiarity, are in constant danger of becoming supersaturated and mercurialism follows with its disagreeable and sometimes even disastrous results.

Mr. Cotterell claims that both of these dangers can be avoided by the intramuscular method of administration. Regularity of dose is secured because the matter is not left to the patient and to chance, but the doctor himself makes the injection once a week. Further, when given in this way, a much smaller quantity of the drug produces the desired effect, and thus there is less danger of supersaturation and mercurialism.

The preparation recommended as the safest and most efficient is the *soziodol* of mercury, which may be obtained from Messrs. Burroughs, Wellcome & Co. in the form of hypodermic tabloids. The results, in Mr. Cotterell's hands, so far seem to have been highly satisfactory, but for those and the various details and necessary precautions in carrying out the treatment, we must refer the reader to the book itself.

Rules for the Estimation of Alcohol in Imported Spirits, with Tables giving the Specific Gravity of Alcohol from 984 to 936. Computed to the Third Place of Decimals. By C. J. H. WARDEN, M.D., Chemical Examiner to the Government of Bengal. Calcutta, 1892: Bengal Secretariat Press. Large 8vo. 414 pp. 10s.

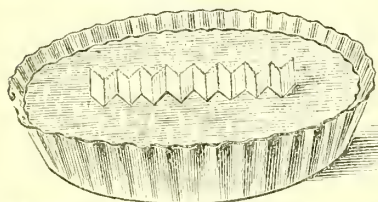
IN a temperate climate, such as we live in, the analyst must stretch his imagination before he can realise the difficulties which beset his brother-analyst in such a climate as India, where a temperature of 85° to 90° and a highly humid air are about the normal conditions. Under such circumstances the estimation of alcohol becomes one of the most ticklish things possible. It is necessary to make measurements at 60° F., but as soon as a specific-gravity bottle and its contents are brought to that temperature and removed into the air atmospheric moisture begins to condense upon the bottle, the contents expand, and the whole operation is practically vitiated. Dr. Warden has overcome that difficulty, and explains his whole process of alcoholic estimation in the brief preface and "rules" which precede the lengthy tables which make up this book. The book is intended for the use of the Bengal Revenue chemists who deal with imported spirits or spirituous liquids.

The method of estimation consists in taking 100 c.c. of the liquid, placing this in a copper flask, and washing out the measuring-flask twice with 100 c.c. of water each time. The washings go into the distilling-flask. The distilling arrangement has been designed by Dr. Warden. It enables five samples to be worked at one time, so that there are five flasks and five worms, the latter being enclosed in a single water-trough. Before the sample is measured it is cooled in the condensing water, and the distillate is measured at the same temperature—that of iced water. Two hundred c.c. is distilled from the mixture in the flask, and a 100-c.c. sp. gr. bottle is filled with the distillate. This bottle is designed by Dr. Warden, being provided with a cap having a capillary hole at the top for the escape of air, but so well fitted to the shoulder of the bottle that the dilute alcohol as it escapes from the stopper-orifice is caught, and thus the weighing becomes independent of temperature since the measurement is made at 60° F.

The alcohol specific-gravity tables extend to 409 pages, and give the U.P. and O.P. percentages represented by the distillates between .984999 and .93616. It follows that, as the distillates contain the alcohol of 100 c.c. of the sample in 200 c.c., the alcoholic percentages are actually double what the specific gravities represent. Although this is explained in the preface the title-page is not strictly correct. However, the tables are intended for the Revenue chemists, and this way of putting it is best for them. We must congratulate the author on the completion of what must have been a herculean task, but the fact that the tables are the fullest existing is a "feather in his cap" which he is not likely to be called upon to hand over to another. It may be explained that the tables represent 49,000 distinct calculations. We have compared a selection of the factors with other alcohol tables and find them to agree.

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roughly, ensuring
more secure disin-
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Editorial Comments.

COMPANY PHARMACY.

THE correspondence which has been raging (to put it literally) in this journal during the last month on the conduct of pharmaceutical businesses by unqualified companies has not, so far as we can see, produced many valuable suggestions, and we propose now to bring it to a conclusion. It arose out of the report of a company which had been extending its field of operations in a somewhat alarming manner. We cannot help regarding as a serious omen the extension of this system of business, associated as it must be in the long run with the extinction of individual pharmacies. Nor can we decline to sympathise with those chemists and druggists who find themselves suddenly confronted with a form of competition which from their point of view seems hardly fair. But we do not see that any possible good can result from the recriminatory letters we have published except in so far as they may make the writers, and those whose views they represent, feel better.

The most interesting letter in the series was undoubtedly the one from Mr. Jesse Boot, which we published on November 25. To that gentleman, who has happened to be the scapegoat on the present occasion, we think some sort of apology is due. Our own comments, at least, though based on the report of Messrs. Boots (Limited), were directed against the system which that firm represents, and against the system only. We have no reason to doubt Mr. Boot's claim that his businesses are conducted with conscientious care for the public, and with liberality and consideration towards the

staff. As far as we know, too, his company obeys the law as it has been interpreted. Moreover, we may remark, in passing, what is of course sufficiently obvious, that the assumption made by some critics—that a dividend-earning company can do with much smaller aggregate profits than an ordinary tradesman—is not a sound one. The company has to earn for each shop sufficient to support its qualified manager, and something to meet company expenses and to yield a dividend besides.

But Mr. Boot does not challenge our general assertion that the success of company pharmacy means the ruin of pharmacy as a profession if it should widely extend. He seems, indeed, to accept that view. But he says our alarm is visionary. His twenty-nine shops have required ten years to establish, and anyone who has practical acquaintance with the supervision and capital necessary to equip and stock these shops must realise how impossible is anything like a universal development of the system. There is much force in this reply, but it seems to us that what is possible to Mr. Boot in the Midlands is possible to a score or a hundred other companies in the north, the south, the east, and the west. And there is, of course, no guarantee that other companies will insist on such strict conditions as we are informed prevail in his establishments as regards quality. Mr. Boot also replies with a *tu quoque*. The Pharmacy Act, he says, permitted a Liverpool chemist to establish nearly a score of shops, and when he died permitted his unqualified executors to continue to carry them on. This is true, but the cases are not quite parallel. We are not hearty advocates of branch shops in any case, but so long as the responsible owner is a qualified pharmacist the objection does not arise as it does in the case of a company of owners composed, presided over, and directed, it may be, by men without any shadow of acquaintance with pharmacy. The statutory concession to executors is not at all similar to the "*casus omissus*" of companies. It is a right and reasonable means of protecting a fairly-earned property against what would be in many instances a cruel legal confiscation, and it does not involve, as company rights do, a perpetuation of unqualified ownership.

We are charged by some correspondents with not having suggested a remedy for the evil which we assailed. We have been urging the only possible remedy ever since the House of Lords decided that companies were not struck at in the 15th section of the Pharmacy Act fifteen years ago. As Bill after Bill has been drafted by the Pharmaceutical Council for the amendment of the Act, we have urged that a clause should be included, whatever else was omitted, requiring that the law should apply to companies as well as to persons. The difficulty can be met in no other conceivable manner. Proposed federations of chemists which are to terrify Parliament by their combined determination are a little ridiculous; appeals to assistants to refuse to serve the Baal of pharmacy are as unheroic as they are unreasonable; and attempts to coerce assistants by calling upon the authorities to strike their names off the register are not only hopelessly unrealisable, but if they were not would be so unrighteous that we do not care to discuss them seriously. The fifteen years of delay have no doubt rendered any chance of legislative amendment much more difficult than it might have been, but that period of incubation seems to have been necessary for the idea to have got itself hatched at Bloomsbury. Perhaps the demonstration in this journal may have quickened the process somewhat; anyway, we read in the *Pharmaceutical Journal* a fortnight after our previous article under this title an editorial statement announcing that "the system of company trading is extending so rapidly, to the

detriment of registered chemists and druggists," and an announcement that "a representation of the case recently made to a prominent member of the House of Commons has elicited from him an expression of opinion that the system referred to should be put an end to, and an assurance that he will favourably consider any practical proposal submitted to him for securing that object." To which hopeful but somewhat indefinite announcement was of course appended the usual appeal for guineas.

THE CENTRAL PRICE OF QUININE.

The natural price is, at it were, the central price to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep them suspended a good deal above it, and sometimes force them down even somewhat below it. But whatever may be the obstacles which hinder them from settling in this centre of repose and continuance, they are constantly tending towards it.

ADAM SMITH,—"Wealth of Nations," Book I, ch. 7.

IN the excellent letter from Baron von Rosenberg, the Indian cinchona-planter, which we published a few weeks ago, many weighty reasons were given why cinchona-bark ought to rise considerably in price within the near future. And the reports which have since been received from Java, now the key of the bark-position, go a long way to confirm the belief that during the coming year there may be a considerable decline in the cinchona-exports from that island. Other factors which will make for higher prices of the chief cinchona product are the admittedly large decrease in the London bark-stocks, which have fallen from 49,502 bales of all kinds on December 1, 1892, to 39,654 bales on the 1st of this month, and the supposed, but, unascertainable reduction in the supply of second-hand quinine existing in this metropolis and other centres of the trade. We have often been reproached with manifesting in this journal an undue partiality for what are called "bear" arguments, and with laying too much weight upon indications of approaching falls in price. Supposing—what we do not altogether deny—that such a tendency has really found expression in these columns, the cavillers might be answered with the words that if they wish for facts in justification of these alleged views, they only need to look around them and compare the prices of the leading drugs now and, say, ten years ago. So far as quinine is concerned, our often-expressed disbelief in any prolonged improvement in the market so long as the notoriously existing causes of over-supply were not removed has certainly been justified by events, but we fully recognise that in the course of the year which is now closing the conditions favouring lower prices have undergone considerable modifications. We will go further, and express our belief that if the information upon which we must base our views can be depended upon (and unless systematic speculation should depress prices unduly), the era of quinine at 9d. per oz. and less may be regarded as closed, and we shall probably shortly arrive at a time when 1s. or thereabouts will be the normal axis round which, with a short radius, prices will revolve.

We base these views upon indications revealed by a general and careful survey of the cinchona and quinine markets, and not, we hasten to add, upon the speculative movement which, in the course of the last fortnight, has caused quinine to advance from 9½d. to about 10¾d. per oz. These sudden eruptions of blotchy speculation threaten to become chronic about Christmas-time, and they really deserve no encouragement from dealers who are anxious to see a steady, constant improvement in the market, such as the present state of bark-production and quinine-consumption appears to warrant. The circumstance that some firm or

another ostentatiously buys one or two hundred thousand ounces of quinine, not because it is actually required by consumers, but simply because it is thought advisable to give a fillip to the market, cannot improve the commercial position of the drug in the long run, inasmuch as it simply transfers to speculator B what was previously held by speculator A. The mere speculator, it is well to remember, is equally the enemy of the manufacturer and of the consumer. Like the "menial servant" upon whom Adam Smith is so severe, his services to the community, such as they are, perish in the very instant of their performance, and seldom leave any trace or value behind them.

Looking simply at what happened during the closing months of the last four years, we shall find that on each occasion the quinine-market began to show a sudden revival shortly before the Christmas holidays, and that the excitement generally lasted until the New Year's business had fairly commenced, only to evanesce like the oft-quoted baseless fabric of a vision, about the middle of the first month. Thus:—

In December, 1889, quinine rose rapidly from $13\frac{1}{4}d.$ to $14\frac{1}{4}d.$ per oz., and to $15\frac{1}{4}d.$ per oz. in January, 1890, after which it began to decline.

In December, 1890, quinine closed firmly, at $12d.$ Early in January, 1891, it rose to $12\frac{3}{4}d.$ per oz., after which it began to decline.

In December, 1891, quinine rose from $8\frac{3}{4}d.$ to $9d.$, and in January, 1892, to $9\frac{1}{4}d.$, after which it began to decline.

In December, 1892, quinine rose from $9\frac{1}{4}d.$ to $9\frac{3}{4}d.$ per oz., and in January, 1893, to $9\frac{9}{16}d.$ per oz., after which it began to decline.

On none of these occasions, it is well to observe, was there any backbone in the article. Combination-rumours, influenza, sometimes the mere idea that the drug was cheap, were the guiding motives of the speculators, and in each case the movement ended in leaving consumers generally more distrustful of the drug than ever. It is only fair to state, however, that a not inconsiderable proportion of the sales which have been made this month are said to have been made to wholesale druggists and other *bonâ-fide* consumers.

A RETROSPECT AT QUININE.

IN the preceding article we have pointed out that quinine and, for the matter of that, cinchona-bark, are in an economic position which justifies a rise in their prices apart from all merely speculative market-rigging. We are, in fact, firmly of opinion that at the present time there exists a strong undercurrent in the quinine market making for higher prices, and that, as soon as the frothy surface-wash of speculation has subsided, that undercurrent will begin to make itself distinctly felt. We have already roughly enumerated some of the causes that lead us to expect a gradual improvement in the drug, and we may perhaps add another, which may possibly count for a good deal. It is the tacit, if not actually written, understanding to refrain from cutting which has for some time existed among the German quinine-manufacturers. Since it has been concluded the market has been singularly devoid of excitement, and it is questionable whether the "understanding" would bear the strain of any sudden manifestation of rash speculation, such as may very conceivably await us next year. But if the quinine-makers abstain from playing at cross-purposes they can do very much to increase the stability of the market, and in the present disorganised condition of the cinchona-growing industry they can make their weapon cut both ways by keeping quinine-prices up and the bark-unit down. Appearances certainly favour the

expectation that 1894 may be the most interesting year in the quinine-market since 1884.

The great majority of wholesale druggists, brokers, and shippers will certainly be only too glad to turn their backs for ever upon cheap quinine. There is scarcely a man among them who has not had cause to regret having touched the drug in the way of business for the last ten years. It is to be hoped that those who, after waiting with a patience worthy of a better cause, have ere now ridded themselves of their stock at a sacrifice will have learned wisdom by experience, while those who have clung to their costly holdings throughout the evil time may now love them the more for the dangers they have passed, and rejoice in the possible advent of a time when they shall be able to sell them with a better prospect of a fair return. We are afraid that these speculators will hardly be able to find cause for loving us that we did pity them, for had they taken this journal's advice to heart earlier, they would not now be holders of expensive stock at all.

The bark-growers too, or such of them as have weathered the storm, and who have tasted that bitterest of all sorrows of remembering earlier happy times during later years of misery, will again feel hope rise high within them when within the near future they hear, as possibly they may, of steadily-rising units and contemplate the increasing store of wealth accumulating in the dermis of their *Ledgerianus* and *Officinalis*.

How far removed does not the time appear when all the drug-world wondered whether quinine could possibly fall as low as 5s. per oz.? And yet it is only ten short years ago since that dreaded cataclysm befell the drug-trade. On January 24, 1884, after the breakdown of the short-lived notorious "combination" 10,000 oz. of Zimmer's quinine were sold "without reserve" by public sale in Mincing Lane at 5s. to 5s. 3d. per oz., a decline of 2s. per oz. from the quotation of December, 1883. A twelvemonth later, at the end of 1883, second-hand German bulk quinine, which had then already become the bogey of the market, might be bought at 3s. 8d. per oz. and since then, with scarcely a rally the quinine-prices have sunk lower and lower. Until 1883 and 1884, those comet-years of the quinine-trade, an occasional drop or rise of a shilling per oz. or so was regarded with comparative equanimity. It is true that it was on record that once—in 1864, we believe—quinine had sold at as low a figure as 4s. per oz., but it was hardly expected that so low a price would ever return. When in 1886 half-crown quinine became a horrible reality, and still more so, when afterwards, in the same year, 1s. 10d. per oz. was momentarily quoted, the trade generally began to think that rock-bottom had been touched, and it is a curious and instructive pastime to re-read some of the circulars issued at that period by firms who demonstrated with the utmost vigour, and staked their reputation upon the correctness of their opinion, that the process of depreciation could no further go. Nevertheless, in November, 1887, 1s. 3d. per oz. was accepted in the wholesale market, and in the drug-auctions of May 16, 1889, "shilling quinine" became an historical fact. Nay, the descent into Avernus continued until this spring, when a parcel offered at auction in London only realised $8\frac{1}{2}d.$ per oz. Those who "assisted" at that sale may perhaps carry about with them for the rest of their lives, or at any rate until the advent of artificial quinine, the proud remembrance that they witnessed the lowest quotations on record in the history of the article.

POISONOUS PATENT MEDICINES.

A medicinal compound for the cure of cholera, dysentery, diarrhoea, and similar complaints is made by mixing together,

in equal proportions, sal volatile, peppermint, spirit of camphor, and laudanum. M. Rendell, 33 Warwick Road, Earl's Court, London, has succeeded in getting English letters patent for the mixture (13,922 July 30, 1892). We must, therefore, add this to the list of poisonous patent medicines, unless the Pharmaceutical Societies take action at once to have the letters patent annulled. There appears to be just ground for such action, for the above mixture has long been used as a medicine for the purposes described.

PHARMACOPŒIAL LATIN TITLES.

Professor Attfield's note on the U. S. P. Latin titles is followed up in the *American Druggist* by a brisk commentary from leading pharmacists, such as Dr. Charles Rice, Professor Coblenz, Mr. Albert B. Taylor, Mr. Hallberg and Professor S. P. Sadtler. All agree that magnesi sulphas is not correctly rendered by "magnesium sulphate," but it was not intended to be, and none of the commentators appear to like "magnesium sulphuricum" as a title. Dr. Rice considers that "magnesi sulphas" would be the proper thing if it becomes desirable to make the basylous portion of the salt adjectival. All are agreed that latin titles should not be abolished.

POISONS IN INDIA.

Indian Medical Journals continue to advocate strongly restriction on the sale of poisons there. It is considered that the restriction should be of the most stringent character, and one journal suggests that there should be a special commissioner. One reason for this suggestion is that there is in India a class of criminal-poisoners called *Daturiahs*, who pursue their infamous trade of robbery, often resulting in murder, in villages and towns, on railways, and even in Calcutta. They have acquired their name by using the *datura* plant as their agent. These criminals generally attach themselves to travellers and become very social, and then by means of sweetmeats, or other eatables, administer the drug. They are careless regarding the dose, and sometimes their victims never awake from their stupor. Such a high authority as Dr. Chevers has stated that since the suppression of Thuggee the crime of poisoning has increased greatly, and is prevalent in all three presidencies of India.

BUFFALO FOR THE BUFFALOES.

A Toronto paper tells the following story. Messrs. Kellar & Deuchler, druggists, 761 Seneca Street, Buffalo, U.S., engaged for their business an assistant named Ellson Feir, who was living, at the time he was engaged, at Lindsay, Ontario. After Mr. Feir had been at work in his situation a short time, a deputation of Buffalo drug-assistants called on the inspector of police and stated the circumstances. The inspector called at the pharmacy and questioned Mr. Feir, and ascertained that he had been engaged while he resided out of the country. His services were imported, in fact. If he had visited Buffalo and Messrs. Kellar & Deuchler had engaged him there, as we understand, no offence would have been committed. But as it was, the law relating to importing labour into the United States had been infringed, and the inspector had to vindicate it. He told Keller & Deuchler they must pay Mr. Feir his salary up to that day, and he must see him back to Canada. The employers did as they were told, and requested that as they had acted in ignorance of the law they might not be prosecuted for their crime. Mr. Feir recrossed the river, and is informed that he cannot be re-employed by the firm inside of five years—that is, until he may become an American citizen. We record this little history here as a tribute of respect to the United States labour law, and especially with a view of honouring those Buffalo drug-clerks whose generous vigilance ensured its enforcement.

MORE NEW REMEDIES.

In our last notes we mentioned "migranin," a new substance proposed as a remedy for sick-headache and neuralgia, which is said to be a double citrate of antipyrin and caffeine. An analogue to this, in looseness of constitution at least, has also been introduced under the name of

Antirheumatin.

This body is a salicylate of sodium and methylene blue, and occurs in dark blue prismatic crystals, soluble in water and spirit, and having a slightly bitter taste. As its name implies, it is used in the treatment of acute rheumatism, the dose being small—namely, $\frac{1}{16}$ to $\frac{1}{20}$ grain in pill every two or three hours. It colours the urine green owing to oxidation of the methylene blue in passing through the body. Another remedy for the same disorder is

Tetraethylammonium Hydroxide.

It can be made by treating triethylamine with ethyl iodide; union results, and on treatment with silver oxide and water the iodine is replaced by OH, the resulting compound being $(C_2H_5)_4NOH$. It is crystalline, bitter and caustic to taste, strongly alkaline, and closely resembling ammonia, absorbing CO_2 from the air, and splitting up into triethylamine, ethylene, and water. It has been given in Germany in 8 to 15 minim doses of a 10-per-cent. solution, three or four times a day, or in 8-minim doses of 1-per-cent. solution hypodermically. The results are considered satisfactory.

Trikresol.

This is an antiseptic introduced by Schering's, of Berlin, to take the place of carbolic acid. It is a mixture of the three cresols found in coal-tar—viz., the meta, para, and ortho cresols—and has the advantage over carbolic acid of being non-toxic, and is superior to other cresol compounds in being soluble in cold water. Trikresol is synthetically prepared. According to Professor Gruber (*Pharm. Zeit.*), water dissolves from 2.2 to 2.5 per cent. of trikresol; but a 1-per-cent. solution only is required in surgery, that being equal in antiseptic power to a 3-per-cent. carbolic-acid solution. Trikresol is a water-white liquid, having the odour of creosote, and it boils from 183° to $205^\circ C.$, the fractions being—

below $183^\circ =$ — per cent.		
183	„ $185^\circ =$	4.3 „
185	„ $190^\circ =$	5.3 „
190	„ $195^\circ =$	56.0 „
195	„ $202^\circ =$	34.4 „

Carbolic acid boils at 183° , orthocresol at 188° , metacresol at 198° , and paracresol at $201^\circ C.$ So that there can be little or no carbolic acid in trikresol. The specific gravity of the liquid is 1.042-1.049 at $20^\circ C.$ It contains 40 per cent. of meta, 35 per cent. of ortho, and 25 per cent. of paracresol.

THE CHEMISTS' AND DRUGGISTS' DIARY.

WE are glad to note that the 1894 DIARY appears to have given general satisfaction. We continue to receive expressions of appreciation from subscribers, and append a selection including some compliments on the journal by renewing subscribers:—

"Your DIARY is very interesting, and well worth the 10s."—A. H. M. (Southport).

"I am very pleased with it."—J. J. (Carmarthen).

"The Buyers' Guide in the present issue of the DIARY is a vast improvement."—A. J. B. (Selkirk).

"The best trade journal we have."—O. & S. (Yarmouth).

A SUBSCRIBER writes: "I have made 77l. 10s. 4d. net this year through reading THE CHEMIST AND DRUGGIST." (77/93.)

"I take the opportunity of expressing my admiration of the way the DIARY is got up, and my appreciation for its utility."—W. K. I. (Dolph).

"Please send two extra copies of the DIARY for '94. I think it even exceeds its predecessors."—J. E. J. (Ipswich).

"I am delighted with the DIARY. It is most useful. The advertisements are a delight in themselves to a business-man."—S. C. M. (Tunstall).

New Companies.

J. CHAPMAN & CO. (LIMITED).—With a capital of 5,000*l.* in 5*l.* shares; to carry on the business of chemists, druggists, importers, &c., of pharmaceutical, medicinal, chemical, &c., preparations. The first subscribers (who take one share each) are:—W. Greer, 70 Bern Road, Norwich, cellerman; H. L. Nichols, 1 Nunn's Court, Norwich, assistant druggist; G. H. Roberts, 16 Eagle Walk, Newmarket Road, Norwich, compositor; W. L. Baker, Mill Hill, Norwich, wine-blender; J. H. Whitaker, 17 Denbigh Road, Norwich, clerk; A. A. Bygrant, 26 Chapel Street, Norwich, clerk; A. G. Bishop, 63 Ashley Street, Norwich, clerk. Directors not specified. Registered Office: 1 Queen Street, Norwich.

MAY'S DRUG-STORES (LIMITED).—Capital 20,000*l.* in 1*l.* shares. Objects: To carry on business as chemists and druggists, dyers, perfumers, surgical and scientific apparatus manufacturers, aerated-water manufacturers, &c. The first subscribers (who take one share each) are:—W. Lewis, 251 Winchester House, E.C., clerk; F. W. Goodman, 46 Idmiston Road, Stratford, E.; D. Slater, 22 Dorothy Road, S.W., clerk; S. C. Brady, 17 Drayton Park, N., clerk; H. R. Savory, 18 Glen Eldon Road, S.W., gentleman; F. Williams, Elm Villa, Kingston-on-Thames, gentleman; G. C. Eides, 85 Isledon Road, N. The directors are not specified.

THE ASTRALINE SYNDICATE (LIMITED).—Capital 20,000*l.* in 1*l.* shares. Objects: to carry on business as refiners and distillers of petroleum, mineral and other oils, and the compounds and products thereof. The first subscribers (who take one share each) are:—T. G. Bonner, 16 Lucas Road, Penge, book-keeper; C. J. Smith, 30 Garfield Road, S.W., agent; T. Park, 22 Walpole Street, New Cross, clerk; M. E. Bernard, 107 Cannon Street, E.C., clerk; E. C. Woodman, 63 Isledon Road, Finsbury Park, clerk; J. T. Concanon, 8 Cowan Street, Camberwell, stationer; W. C. Chapman, 76 Sussex Road, Holloway, clerk. The first directors are to be appointed by the subscribers; remuneration 5 per cent. of the net annual profits, divisible. Registered office: 20 Bucklersbury, London, E.C.

RALPH HULL (LIMITED).—With a capital of 3,000*l.*, in 1*l.* shares; to acquire and carry on the business of a mineral and aerated-water manufacturer as hitherto carried on by R. Hull at Bishop Auckland. The first subscribers (who take one share each, with one exception) are:—R. Hull, Durham Street, Bishop Auckland, mineral-water manufacturer, 300 shares; A. J. Wilkinson, 27 Newgate Street, Bishop Auckland, manager; W. J. Wright, 2 Newgate Street, innkeeper; G. Wright, 4 Bondgate, Bishop Auckland, innkeeper; W. Todd, Eldon Lane, near Bishop Auckland, innkeeper; W. Crowe, Evers Green, innkeeper; J. Hutchinson, Coundon, innkeeper; J. May, Bishop Auckland, innkeeper. There shall be five directors, the first being R. Hull, W. J. Wright, G. Wright, W. Todd, and W. Crowe. Qualification, 25*l.* Remuneration, 10*s.* each for each board attendance. R. Hull, as managing director, is to receive 110*l.* per annum and director's fees. Registered Office, Durham Street, Bishop Auckland, Durham.

THE TESTS FOR EUCALYPTUS OIL.

By H. HELBIG AND DR. F. W. PASSMORE.

IN the paper published under the above title in *THE CHEMIST AND DRUGGIST*, December 16, 1893, page 860, Mr. Dott correctly points out that the eucalyptol is the essential constituent of eucalyptus oil. Although we quite agree that it is more or less tedious to freeze out the eucalyptol in the various fractions obtained in the distillation of eucalyptus oil, yet this is the only available method which yields satisfactory results.

To rely on oils of which 50 per cent. distils between 170° C. and 180° C. is of no avail, and to make this point clear we give several instances of oils, all examined by us during 1893, which show that in spite of 50 per cent. of the oils distilling between 170° C. and 178° C. the percentage of crystallisable eucalyptol in those fractions was very meagre,

though we add the actual proportions of eucalyptol which the oils were found to contain.

—	170°-173° C.		173°-175° C.		175°-178° C.		Total Percentage of Eucalyptol
	Per Cent. of Oil	Per Cent. of Eucalyptol	Per Cent. of Oil	Per Cent. of Eucalyptol	Per Cent. of Oil	Per Cent. of Eucalyptol	
1	9.4	—	24.6	—	22.9	8.5	36.0
2	15.7	—	20.8	—	22.6	—	31.1
3	14.4	—	18.0	—	19.6	2.5	30.1
4	28.9	—	15.0	—	16.2	—	15.9
5	.9	—	36.0	—	29.1	—	—

But we can also not agree with Mr. Dott's statement that the fractions from 180° to 190° C. do not yield crystallisable eucalyptol when placed in a freezing-mixture.

We never represented that the fraction 170° to 190° C. should be taken as eucalyptol; quite the contrary: all we say is that in a good oil 80 per cent. should distil between 170° and 190° C., and the fractions between 170° and 190° C. should be put into a freezing-mixture in order to ascertain the crystallisable eucalyptol therein. Even when the fractional distillation is cautiously carried out, eucalyptol is scarcely found in any fraction under 175° C., the bulk coming over between 175° and 185° C., whilst the fraction 185° to 190° C. nearly corresponds with the fraction 170° to 175° C. in eucalyptol content.

We can give ample evidence on this point, and append twenty-eight typical analyses, giving the amount of oil and the yield of eucalyptol in the various fractions.

It must not be forgotten that we refractionate the liquid portion left after the eucalyptol has been frozen out, and the total amount of eucalyptol in the table refers to the combined yield of the first and second crystallisations.

Also, in this redistillation, the eucalyptol is contained particularly in the fractions 175° to 185° C., the lower-boiling eucalyptol being always more or less retained in distillation by the higher-boiling constituents of eucalyptus oil, to which we have already referred in a note on the subject contained in *THE CHEMIST AND DRUGGIST*, July 29, page 162.

—	170°-173° C.		173°-175° C.		175°-178° C.		178°-185° C.		185°-190° C.		Total
	Per Cent. of Oil	Per Cent. of Eucalyptol	Per Cent. of Oil	Per Cent. of Eucalyptol	Per Cent. of Oil	Per Cent. of Eucalyptol	Per Cent. of Oil	Per Cent. of Eucalyptol	Per Cent. of Oil	Per Cent. of Eucalyptol	
1	16.6	—	21.6	—	22.2	7.4	17.6	11.5	5.3	4.7	40.0
2	2.6	—	15.7	—	31.4	7.0	28.4	19.0	6.9	5.9	50.2
3	2.6	—	15.4	—	33.6	1.8	27.8	19.0	4.4	3.2	41.0
4	.3	—	17.3	—	33.7	3.8	26.5	8.0	5.5	—	34.5
5	17.1	—	23.0	—	19.3	5.5	18.5	5.8	5.1	—	28
6	1.4	—	4.7	—	45.1	7.6	28.2	3.8	5.6	—	30.7
7	10.0	—	24.1	3.0	22.7	9.5	22.1	15.0	5.0	2.2	41.4
8	20.2	—	20.8	1.4	22.2	7.7	18.5	9.2	4.4	3.1	41.4
9	2.7	—	19.7	—	32.3	2.0	24.9	1.3	4.6	—	23.6
10	22.6	—	18.4	1.8	20.4	6.8	17.6	9.3	4.6	2.5	41.2
11	13.6	—	21.9	—	20.9	9.5	21.1	10.9	5.9	3.8	41.4
12	1.2	—	7.7	1.8	39.6	8.4	29.0	15.3	5.4	3.0	52.9
13	14.6	—	22.7	3.3	23.4	11.3	20.0	13.9	4.7	3.4	50.0
14	1.2	—	2.1	—	37.0	9.8	33.5	24.4	5.9	2.8	56.2
15	13.3	—	20.2	2.5	22.5	12.0	20.2	15.8	6.1	5.6	40.2
16	5.8	—	18.0	1.6	26.1	12.0	24.9	14.2	6.2	4.0	44.9
17	22.4	—	17.2	5.2	16.0	11.4	17.8	15.0	4.2	3.3	47.5
18	.9	—	13.3	1.3	27.7	9.5	31.0	23.7	7.0	5.2	53.3
19	.4	—	1.0	—	4.8	31.1	23.2	14.9	3.4	—	60.3
20	.6	—	4.3	—	44.8	13.6	29.3	16.4	6.7	2.5	47.5
21	.6	—	6.1	2.9	44.3	15.2	28.7	15.4	6.7	4.2	54.5
22	12.0	—	23.7	4.2	23.0	11.2	21.0	13.3	6.3	4.3	49.1
23	23.2	—	20.8	3.3	17.0	7.1	18.2	14.0	5.7	4.6	47.3
24	.8	—	15.7	—	34.9	4.9	26.8	15.9	6.4	4.6	47.5
25	3.3	—	16.6	11.4	58.5	43.2	14.6	10.2	7.0	—	64.8
26	1.0	—	11.1	7.5	62.1	45.6	18.9	14.4	6.9	—	67.5
27	2.4	—	16.8	10.4	38.6	24.7	25.3	20.7	4.1	3.5	76.9
28	.8	—	1.2	—	48.4	22.0	35.5	16.9	4.3	.2	64.1

A NOVELTY IN SHOP-FITTINGS is reported by the Chicago correspondent of the *Pharmaceutical Era*. This consists of fixtures of quarter-sawed oak of such construction that they occupy but one-half the space of the old fixtures, and furnish over double the shelf-room. This has been effected by making the fixtures with "double decks" and balcony.

Bankruptcies and Failures.

Re WILKIN CORRIE, formerly in partnership with Ernest Brown, and trading as Corrie, Cook & Co., South Castle Street, Liverpool, Perfume-manufacturers.

THIS bankrupt applied for his discharge on December 15. According to the Official Receiver's report, the liabilities were 1,465*l.*, whilst the assets realised 272*l.*, but had been returned as being 782*l.* The stock and fixtures, which the bankrupt valued at 85*l.*, only realised 47*l.*, whilst an equity of property in Duke Street had resulted in nothing, although the bankrupt valued it at 465*l.* A first and final dividend of 2*s.* 6*d.* had been declared on the joint estate. The bankrupts did not keep proper account-books, and the deficiency was not properly accounted for. It was said that goods to the value of 105*l.* were stolen from an Isle of Man exhibition, and, further, that 185*l.* had been embezzled by a former manager of theirs. Mr. Bremner for the debtor, said he thought that all Corrie was guilty of was foolishness on account of youth and inexperience. His discharge was suspended for three years.

Re JOHN RILEY TURPIN, Addingham, Dealer in Drugs, Oil, and Paint.

It appears from the report of the Bradford Official Receiver that this debtor began business at Addingham in February last with a capital of 100*l.*, 85*l.* of which he borrowed and was still owing. He had kept no books of account, and stated that his total turnover had only been about 150*l.*, and that the majority of his sales had been at less than cost price. His expenses had been about 2*l.* a week. He denied that he had been exceedingly negligent, and said he had been sober. Whilst he was in business at Addingham a mill stopped, throwing about 250 persons out of employment, and his trade was adversely affected by the circumstance. The examination was closed.

The following are creditors:—

	£	s.	d.
Bentley, J. R., Leeds	12	0	0
Goodall, Backhouse & Co., Leeds	22	0	0
Humphries & Co., Bradford	10	0	0
Rider, J. C., Leeds	13	15	0
Simcock, T. W., Leeds	15	0	0

Re HERBERT EDMUND HOLLINGS, Leeds, Chemist and Druggist.

THE statutory meeting of creditors in this bankruptcy was appointed for December 15. The Official Receiver, who presided, said the debtor had not put in an appearance, owing to illness, neither had he filed any statement of accounts. The matter was left in the hands of the Official Receiver for administration in the usual way.

Re EMANUEL MOSS COHEN, late of Houndsditch, E.C., Sponge Merchant.

UNDER a receiving order made against this debtor on November 23, accounts have been filed showing liabilities 1,970*l.* 15*s.* 5*d.*, and no assets.

According to the observations of Mr. G. Wreford, Official Receiver, the debtor states that he formerly carried on business as a sponge merchant in partnership with others at Houndsditch, but he was compelled to retire from the firm in August, 1891, in consequence of his having been engaged in accommodation-bill transactions contrary to the articles of partnership. Since February, 1892, he has acted as manager to his wife, who carried on business as a sponge merchant at Gray's Inn Road, under the style of "F. M. Cohen." His insolvency is attributable to liabilities in respect of bills accepted for the accommodation of other persons, and to interest on borrowed moneys.

DIVIDEND NOTICE.

A FIRST and final dividend of 10*s.* in the pound has been declared in the estate of William Joseph Wilson, chemist and druggist, payable at the offices of Mr. A. E. Preston, Cornmarket Street, Oxford.

DEEDS OF ARRANGEMENT.

Bradford Drug Company, The, trading as Walter Bradley, 85a Bolton Road, Bradford, and residing in lodgings at 3 Ann Place, Bradford, wholesale druggist. Trustee: Wm. Lawson, 49 Sunbridge Road, Bradford (accountant). Dated, December 13; filed, December 15. Unsecured liabilities, 307*l.* 15*s.* 2*d.*; estimated net assets, 72*l.* 2*s.* 6*d.* The following are scheduled as creditors:—

	£	s.	d.
Conlitis, Julia, Batley	225	0	0
Hirst, Brook & Hirst, Leeds	39	19	10
Woodcock, Atkinson & Co., Bradford	16	0	2

(And sixteen under 10*l.*)

Clarke, George Barlow Fincastle, Beaconsfield House, Upper Grosvenor Road, Tunbridge Wells, physician and surgeon. Dated, December 15; filed, December 15. Unsecured liabilities, 679*l.* 1*s.* 1*d.* Composition of 10*s.* in the pound payable upon execution hereof. The following are scheduled as creditors:—

	£	s.	d.
Arnold & Sons, Frant	13	12	4
Beech, Edwin, Lamberhurst	17	13	3
Bullin & Son, Tunbridge Wells	250	0	0
Jukes (no address given)	250	0	0
Prickett, S., & Son, Lamberhurst	13	13	0
Pyle, Geo., Tunbridge Wells	17	16	4
Rush, J. W.,	31	1	2
Sailler & Son, London	20	6	6
Soper & Jones, Tunbridge Wells	45	0	0

DEATHS.

BLADES.—On December 6, Frederic Blades, chemist and druggist, formerly of Moseley Road, Birmingham. Aged 51.

BRAMWELL.—On December 9, Rhodes Bramwell, chemist and druggist, late of Windsor Street, Liverpool.

BROWN.—On December 6, Robert Brown, chemist and druggist, Bernard Street, Leith.

COOPER.—On December 19, Mr. F. Ashley Cooper, chemist, at his residence, Main Street, Cokermonth. The deceased gentleman, who was 40 years of age, leaves a widow and two children.

DYSON.—On December 7, Joseph Edward Dyson, chemist and druggist, of Sheffield. Aged 63.

HARRISON.—The death of Mr. W. Harrison, chemist and druggist, Kirkby Lonsdale, is reported. Deceased went to that town half-a-century ago, and purchased the business then carried on by the late Mr. Pieard. He was for many years chairman of the District Liberal Association, and was also a member of the Board of Guardians and a director of the gas company.

HOWELL.—On December 7, William Howell, chemist and druggist, of Bristol. Aged 81.

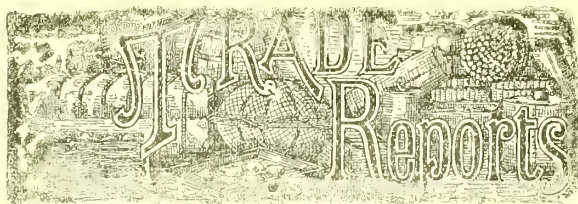
JACKSON.—Mr. P. H. Jackson, chemist and druggist, at his residence, Riversdale, Hale, Cheshire, on Friday, December 15. Mr. Jackson, who was in his 60th year, began business in Knutsford, but he had for a great number of years carried on business in Railway Street, Altrincham.

WIDDOWS.—On December 5, at Pemberton, Lancs, Henry Widdows, chemist and druggist. Aged 77.

WOOD.—On December 13, Mr. William Wood, chemist and druggist, Pontypool. Aged 78. Mr. Wood was the eldest member of the Local Board. The deceased gentleman served his apprenticeship with Mr. Clements, of Newport, and in 1840 succeeded to the business of his uncle, Mr. Thos. Williams, of Pontypool. For over fifty years he was intimately connected with the public and religious life of the district, and being of a genial nature was highly respected. He leaves one son.

YOUNGER.—Mrs. Younger, chemist, Brompton, died on Sunday morning, December 17, from influenza followed by pleurisy. Aged 55.

Mrs. R.: "Christopher, darling, I never can remember whether 'soda water' is written as one word or as two joined together by a syphon."



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., December 21.

Quinine Riggings.

Whenever a little speculative movement occurs in quinine, paragraphs "writing up" the drug mysteriously appear in journals that in ordinary times take no interest whatever in the chemical market. Hitherto the anonymous correspondents who precipitate these messages have shown a particular liking for the *Financial News*, and have generally whispered their confidences into the furry depths of that noble journal's aural organ. Last week, however, the Friend of Man who is so anxious to put his fellow-mortals' savings into a good thing, got hold of the City Editor of the *Daily News*, with the result that a queer little paragraph appeared in Monday's issue of that journal, under the heading of "An Influenza Market."

"Since influenza has become an institution with us, and now regularly pays an annual visit, speculation in quinine," says this Solomon, "has become both sound and profitable. Anyone buying it during the autumn months of the year is usually able to turn over his purchases at a profit of fully 20 per cent. during the winter. One of these little spurts is just now in full swing, each day witnessing a fractional rise, and from 8½d., at which sellers were offering a few months ago, quinine has advanced to 10¾d. per oz. The general position of this article, however, is much sounder than in former years, the number of second-hand parcels having been so much reduced that now the business may be said to be almost wholly in the hands of the fabricants (*sic!*). A further shaking out occurred last week, when the London agent for the large German factories, after ostensible offering, became a buyer. Another point is the steady hardening in the value of chinchona bark, from which quinine is manufactured."

After this the paragraph proceeds with the familiar tale of the "grubbing up" of the Ceylon cinchona plantations and the rest. It is truly moving to think that, in spite of low profits and bad trades, there should be so many nameless philanthropists in Mincing Lane always ready to tender disinterested advice about the investment of savings. The person who "influenced" this paragraph is commonly thought to be the agent for one of the German quinine-makers, but it is only fair to say that that gentleman denies the soft impeachment. But, whoever he be, he is, no doubt, investing all his own spare cash in the drug. It may be well, perhaps, to remind the good people who take the *Daily News* investment-tips that hitherto outsiders speculating in quinine have generally, as the Americans say, come out at the little end of the horn. There is a lady as well known in the quinine-market as is the distressed widow with the silver spoons or the German gentleman with the walnut sideboard to readers of the *Telegraph* advertisements. This lady once bought quinine at 10s. 6d. an ounce, because she read in her daily paper that it was cheap at the price. Periodically she tries to "realise," and writes a circumstantial letter to some wholesale drug-firm or another asking what they can get her for her investment. The reply is, say, a shilling, or teapence, whereupon the indignant female swoops down upon the drug-firm, and, waving a Stores catalogue into the face of the principal, demands to know what he

means by offering her teapence when the Stores catalogue gives the price at 3s. 6d.! It is paragraphs such as that in the *Daily News* that are responsible for the existence of this type of investor.

ACID (CITRIC).—Quiet, at 1s. 5½d. per lb. (B.P. quality) from the English makers, but 1s. 5d. per lb. is said to have been accepted.

ACID (OXALIC) is very scarce, but the price still remains 3d. per lb.

ACID (TARTARIC).—The English manufacturers still quote respectively 10¾d. and 11d. per lb. Foreign brands offer at 10½d. per lb., London terms.

ALOES.—Quiet and dull of sale for all kinds. Good hard Zanzibar in skins are very scarce, however, and would realise high prices if offered.

ANISE.—Firm and in steady demand; fair, partly stony and dusty to good bright *Russian* ranges in price from 24s. to 28s. per cwt.

BALSAM COPAIBA.—There has been a good deal of quiet buying lately, mostly, it is thought, by American firms, who look upon the drug as likely to advance, and prices are higher all round.

BALSAM PERU.—Reported exceedingly scarce on the spot. The nearest quotation to-day is 7s. per lb. for fair quality. But that price has not been paid yet.

CANTHARIDES.—Rather slow of sale; bold *Chinese* flies are held at 1s. per lb., which is, we believe, the lowest figure paid; small flies may be had at 10½d. per lb.

CARAWAY-SEED has been in fair demand at from 29s. to 32s., according to quality, for *Dutch* seed; *Russian* offers at from 24s. to 27s.

CHLORATE OF POTASH.—Steady, at 7¾d. to 7½d., f.o.b., Liverpool, and 8d. per lb. in London. For next year the quotations remain as given in our last report, but no one cares to buy at present prices.

CLOVES.—Zanzibar cloves are quiet and rather easier for delivery, March-May having sold at 2½d. per lb. Fair Zanzibar cloves have been sold on the spot at 2½d. per lb.

COCAINE.—Last week we announced that an advance was imminent. Since then it has been actually declared. All the makers (excepting one or two whose quotations are not competitive) now ask 14s. 6d. per oz for hydrochlorate (in tins) in 100-oz. lots, 14s. 9d. for 25-100-oz. lots, and 15s. for less than 25 oz. Delivery may be taken within three months at these prices. The quantities of "crude cocaine" exported from Peru during 1892 were as follows:—London, 2,672 lbs.; Hamburg, 932 lbs.; New York, 221 lbs. The total weight of 3,825 lbs. was valued at 23,422l. 10s.

CREAM OF TARTAR.—Fairly steady, at 67s. per cwt. for best white *French* crystals, London terms.

CROTON-SEED is offering very sparingly. It is believed that, if supplied, fair quality would realise from 22s. to 25s. per cwt.

CUMIN-SEED.—Held for firm prices, but without change in the quotations. Good *Malta* seed, according to quality, is worth 38s. to 41s., and *Morocco* 27s. to 30s. per cwt.

GALLS.—China galls have been tending rather easier; sales have recently been made at 42s. 6d. per cwt. c.i.f. terms, but on Friday last the pendulum began to swing round, and some business was reported at 43s. c.i.f. terms for December-February. Spot sales at 52s. 6d. per cwt.

GUM ACACIA.—At last Thursday's auctions a very considerable supply of acacia gum of various descriptions was offered for sale. *Australian* gum was in increased supply and brought lower prices, good pale frosted selling at 28s.; blocky and glassy at 13s. per cwt. Of *Persian* gum 796 packages were offered, but nearly all bought in, blocky and sea-damaged gum brought from 8s. 6d. to 10s. per cwt. Ordinary reddish and pale sorts have sold privately lately at 20s. per cwt. *Soudan* sorts, plentifully offered, were very neglected, and sales were made at lower prices—viz., dusty reddish at 36s. 6d. per cwt. Fair to good bright hard gum has sold privately at 42s. 6d. to 45s. per cwt. In *East Indian* gums there was a strong demand for Ghatti, which had

already been in brisk request privately, and which realised an advance of fully 2s. per cwt. upon the prices of the preceding auctions. Bold yellow picked brought 37s., medium, sorts 22s. to 23s., ordinary brown 19s. to 21s., pickings from 13s. to 16s., and siftings 17s. per cwt. Dark blocky *Madras* pickings realised 23s. to 24s. per cwt. *Kurachee-Amrad* is slow to move: bright pale to reddish to fair amber drop brought from 40s. to 41s. 6d., pale amber drop 36s., red to amber pickings 24s. to 32s. 6d., clean small siftings 29s. to 30s. per cwt. *Aden* gum sold at 45s. for good bright pale and amber, 34s. 6d. to 35s. for fair, 19s. to 22s. for small to bold siftings, and 18s. per cwt. for dark pickings.

GUM AMMONIACUM.—The demand remains steady, but not very lively, at from 50s. to 55s. per cwt. for fair pale drop, partly drossy mixed.

GUM TRAGACANTH.—Business is quiet and slack, but prices keep very steady—firsts Bagdad ("Persian") at 12l. 10s., seconds at 11l. 10s. to 12l., thirds at 10l. to 11l. 5s., and lower grades at from 9l. 10s. down to 4l. 10s. per cwt. Hog gum is very firmly held, and little is offering. Fair Bassorah has sold at 5l., Syrian at from 55s. to 70s. per cwt.

IPECACUANHA.—A good private demand for *Cartagena* (Colombian) root has been reported since the auctions, and prices of from 4s. 3d. to 4s. 6d. per lb. are said to have been conceded for good quality. *Brazilian* root is also reported steady and in good demand.

MENTHOL.—Exceedingly scarce on the spot. There is now said to be only one holder, who asks nominally 18s. per lb. for good quality; at this figure about 200 lbs. have been sold during the week. Some parcels reported to be of rather inferior quality are offering, however, below that figure. For shipment, 16s. 6d., c.i.f. terms, December-January, is quoted.

MORPHIA.—Very firmly held on the basis of 4s. 6d. per oz. for powder.

OILS (ESSENTIAL).—*Japanese peppermint* oil is said to have been sold to some slight extent at 10s. 6d. per lb. on the spot, and holders now talk of 11s. per lb. for partly dementholised oil. It is reported that for oil with 40 per cent. of menthol 11s. 6d. per lb. has been paid. *Star-anise* oil is held on the spot at 5s. 11d. to 6s. per lb.; for shipment the present quotation is 5s. 4½d. per lb., c.i.f. terms. A sale of 100 cases *lemongrass* oil, by January-March steamer shipment, at 1½d. per oz c.i.f., London terms, is said to have been made recently. *Eucalyptus* oil is very firmly held, fine brands at 3s. per lb., more ordinary grades at 2s. per lb.

OPIMUM.—A considerable amount of business has been done in London during the last ten days in manufacturing-opium at firm prices. Soft shipping and fine druggists' kinds remain neglected, and Persian, also, has not been dealt in recently. The following are the current quotations:—Good to fine soft shipping, 11s. 6d. to 12s. 6d.; good to fine *Smyrna*, 10s. to 11s. 6d.; druggists' seconds, 8s. to 9s. 6d.; manufacturing (Constantinople), 8s. 6d. to 11s. 6d.; *Persian*, 9s. to 11s. 6d. per lb. Our *Smyrna* correspondent writes on December 9:—"In all 150 cases have been taken this week, all for American account, at 8s. 6d. to 8s. 9d. per lb., f.o.b., according to quality; 60 or 70 cases more are required to complete the orders on hand, but holders refuse to sell any more on above terms. On the other hand, buyers are not authorised to pay more than 8s. 6d. for common usual run talequale, and 8s. 9d. for extra selected old, and we think prices will now be maintained at above rates for some time to come; but a good deal will depend upon the success or failure of the winter sowings. The arrivals of opium from the interior to date amount to 1,032 cases, against 3,517 at same period last year." A Constantinople correspondent, writing on December 14, observes:—"America has at last come forward, and a more healthy tone been the result. About 110 cases changed hands last week, three-quarters of which were for America. The prices paid were 8s. 1d. to 8s. 3d., f.o.b., for druggists', and 9s. 6d., f.o.b., for 5 cases Tokats. Fresh confidence has been imparted to holders, who are now asking 8s. 8d. to 8s. 9d., f.o.b., for quantity. Buyers, however, see no reason for paying any advance for the moment. The fair weather has allowed of good winter sowings; but these are very uncertain quantities to count upon, as any

frosts between now and the end of January would quickly destroy the plants, if they are not well covered with snow."

PRUSSIAN OF POTASH.—Yellow prussiate is quoted at 10½d. to 11d. per lb.

QUASSIA.—The market has become slightly firmer lately although no actual business at an improvement in price is reported. Holders now ask 90s. per ton for logs.

QUICKSILVER remains very steady, at 6l. 7s. 6d. in first, and 6l. 6s. 6d. per bottle in second, hand.

QUININE.—Last week the market closed firmly, with some little business in second-hand foreign bulk quinine at 10½d. per oz., and on Friday about 35,000 oz. changed hands at from 10½d. to 10¾d. per oz. Early in the week a further stage in the advance was reached by a sale, on Monday, of some 25,000 oz., at 10¾d. per oz. Since then the market has become quiet again, and no further business has been reported. To-day the position is:—Sellers at 10¾d., buyers at 10¾d. per oz. Nothing doing. The German makers have progressively raised their quotations to 11¾d. per oz. for bulk quinine in quantities and 1s. per oz. for smaller lots. The richest parcel of cinchona offered at last Thursday's Amsterdam auctions was one of 23 bales crushed *Ledger* from a private plantation, containing the equivalent of 12½ per cent. of sulphate of quinine. This lot sold at the rate of 42½c. per half-kilo., or, say, 7½d. per lb., Amsterdam terms. The average unit was 3.86c.; 1,004 kilos. quinine selling at 4½c., 8,344 kilos. at 4c., 7,893 kilos. at 3¾c., and 2,004 kilos. at 3½c. the unit. The chief buyers were:—

	Kilos.
Mr. Gust. Briegleb, who bought about	6,677
Mr. J. J. Louët Feisser,	3,743
Messrs. W. Schoffer & Co.,	3,653
The Pharmac. Hand. Vereen,	3,490
The Amst. Quinine-works,	2,033
Mr. J. de Ligst,	878
Various buyers,	431
Bought in or withdrawn	6,005

The general tendency was firm, with a good demand. A few parcels of unusually fine druggists' bark in heavy mossed silvery quill, about 10 inches in length, were offered, and realised the equivalent of 1s. 2½d. per lb. (80c. per half-kilo.). The tendency in this class of bark was irregular, but very firm for fine quality. The following table shows the quantitative equivalents of sulphate of quinine in the bark offered at the Amsterdam cinchona auctions this year, together with the quantities sold and the average units. It should be borne in mind that in many cases a considerable proportion of the bark withdrawn at auction was immediately sold privately after the sales:—

Date	Offered, Kilos.	Sold, Kilos.	Unit, cents
January 12	23,300	13,200	5½
February 16	14,250	10,250	5½
March 23	23,000	15,000	5½
April 27	14,500	12,500	5½
June 1	22,000	12,200	4½
July 6	25,250	12,850	3½
August 31	25,300	7,000	2½
October 5	18,300	13,000	2½
November 9	17,250	16,250	3½
December 14	26,500	20,500	3½
	209,650	132,550	

SAFFRON.—It is reported from Valencia that there has been a good deal of buying on that market lately by German agents, but there has been no change in price so far.

SHELLAC.—The market closes quiet, both on the spot and for delivery, the only sales reported being a few hundred cases orange TN, at 106s. 6d. for January; 107s. for February; and 107s. 6d. for March delivery. No public sales have been held this week.

TEA.—A very large quantity of tea (considering the period of the year) had been catalogued for public sale for the first three days of this week, and in the case of *Ceylons* the result

has been a very irregular market, and in many cases low prices. On Tuesday a number of poor liquoring Pekoes sold as low as 5½d., per lb., and Souchong down to 5d., though there were undoubtedly many more very common teas than we have been getting. Medium to fine teas in many cases showed a marked reduction, and as importers must have been perfectly aware of the consequences of forcing so much tea so near the holidays, it looks as though we shall have heavy sales after the holidays again. *Indians* have been steadier on the whole, though terminals have dropped three or four points, and many very cheap teas have passed the hammer. Tippy broken Pekoes under 10d. are wonderfully cheap, and good medium Pekoes have been in large supply, and show a reduction in price. *Chinas* and scented teas are very quiet, but there is no disposition to force tea on the market this week, and prices keep steady.

TURMERIC.—The market remains fairly steady, and a sale of 20 tons split Cochin bulbs, January to February steamer shipment, is reported at 7s. 9d. per cwt., c.i.f. Liverpool.

VANILLA.—The following figures are given as representing the annual crop of Vanilla in the island of Bourbon during the last 20 years:—

Year	lbs.	Year	lbs.	Year	lbs.
1873-74	21,563	1880-81	50,663	1887-88	195,925
1874-75	45,903	1881-82	61,031	1888-89	114,877
1875-76	50,340	1882-83	43,409	1889-90	105,707
1876-77	63,390	1883-84	61,707	1890-91	188,423
1877-78	70,569	1884-85	107,025	1891-92	199,586
1878-79	65,406	1885-86	125,560	1892-93	207,320
1879-80	98,316	1886-87	103,907		

WAX (BEES) remains high in price; the importers of *French* brown bees-wax in bars have raised their quotations from 7l. 15s. to 8l. 5s. per cwt.

WAX (JAPAN) remains steady, at 34s. per cwt. for good pale hard squares.

THE LIVERPOOL MARKET.

ANISE.—Further sales in quantity of *Chilian* have been made at 23s. 6d. per cwt., and holders are talking of more money.

CALABAR BEANS.—There are buyers at 1½d., and lots at auction have been withdrawn at 1½d.

CANARY-SEED.—The upward movement is well sustained—large quantities changing hands at 46s. for good bright Turkish.

GUINEA GRAINS.—The expected advance has been established and sales have been made at 25s. per cwt.

OIL (CASTOR).—The market for good seconds (Calcutta is quiet at 2½d., but holders are firm in their views and show confidence in the position of the article, as stocks on the spot are being greatly reduced in the absence of arrivals.

QUILLAIA.—Very firm at 12l. 5s. to 12l. 10s. for good merchandise.

WAX (BEES).—The recent large shipments for export have made holders very firm, and business continues to be done at improving prices; *Chilian* now 7l. to 8l.

THE NEW YORK MARKET.

(From our own Correspondent.)

NEW YORK, December 12.

ALTHOUGH the volume of business transacted during the week has not been very large, there has been a more cheerful tone about the market, and more interest has been manifested than for several weeks past. The cables of considerable activity in *Opium*, both in Smyrna and London, which reached us late last week, induced considerable sales here at gradually advancing prices, and at the close, \$2.15 was the quotation for either case or jobbing lots. The movement has been viewed with suspicion by some of the trade here as being possibly of speculative origin. *Alvin* has been reduced to \$1.10 under strong competition from a com-

parative new-comer in the field. *Balsams* generally are firm, sales of 1,000 lbs. Central American *Copaiba* being reported at 38c. None is quoted from first hands. *Menthol* is firm at \$4.50. *Balsam Tolu* is quoted in one quarter at 25c., though most dealers ask 27c. to 28c. *Jaborandi* leaves are selling in a small way at 48c. to 60c. A large order could probably not be executed. *Guarana* is dull and neglected at 95c. to \$1.00. A sale of 100 cases of *Spermaceti* for export is reported at about 29½c. Stocks are said to be very small. *Cascara sagrada* offers with greater freedom, and 5½c. would no doubt be accepted for a round lot, though 6c. is asked. *Virginia sumach* shares the interest accorded the Sicily article, and has advanced to \$47.50 for spot. *Tartaric acid* is selling from second hands at 22½c. in five-barrel lots. *Oxalic acid* has advanced to 6½c. to 6¾c., and makers are fighting shy of contracts for next year, in the belief of a still further advance. Some export inquiry is reported from Italy for *Blue vitriol*, but it was not sufficient to affect the price of 3½c. to 3¾c. Second hands are quoting *Potassium bromide* in bulk at a half cent below the pool figures. Next to the advance in *Opium*, the most important thing to report is the interest aroused by *Peppermint oil*. Under the combined influences of short crops, short stocks, and active inquiry, both on the spot and abroad, the prices have advanced to \$2.50 to \$2.60 for Western, and \$2.60 to \$2.75 for Wayne County bulk. HGH remains stationary at \$3 to \$3.10. Owing to scarcity *Tansy oil* has been advanced to \$2.50 to \$3.00. *Jalap* is quoted at 24c. to 32c., and an effort seems to be being made to "bear" the market, as it is reported that considerable lots are about to arrive both at Hamburg and London. *Senega* is very dull and weak at 42c. for Minnesota, and 41c. for Manitoba. *Jamaica ginger* is in small supply, and firm at 14c. to 17c. for unbleached, but there is but little inquiry. *Golden seal* has sold to the extent of 1,200 lbs. for export at 21½c., and is now quoted firm at 22c. *Texas snake-root* has sold at 28c. *Mexican sarsaparilla* continues firm at 10½c. to 11c. No stocks are in first hands. A lot was sent back to this city from St. Louis and sold at 9½c. to 10c., presumably with a view to realising cash to meet maturing obligations. The market was not glutted however.,

(Telegram from our Correspondent.)

NEW YORK, Wednesday night.

CENTRAL AMERICAN *Copaiba* balsam has advanced here to 34c. per lb. Messrs. Powers & Weightman have raised their price for *Quinine* in 1-oz. vials to 28c. Genuine *Canada balsam* is dearer; it now costs 35c. per lb. from first-hand holders. The fall in *Senega-root* foreshadowed last week has become a fact, and to-day 40c. per lb. would be taken for good bright quality. Mexican *Sarsaparilla* is very firmly held; this week 25 bales of it have been shipped to London. The shipments of *blue vitriol* to Europe have been very heavy lately. American oil of *peppermint* closes very firm at the rate of \$3.00 per lb. for HGH brand, but no business is doing at that figure.

MR. EDMUND JONES, chemist, of the Medical Hall, Hanley, has been installed Master of Menturia Lodge of Masons, which is one of the largest and oldest lodges in Staffordshire.

A REMEDY FOR CHOLERA.—The Russian Government has despatched to Central Asia several physicians to study the effects of the plant *Ferula Gambal* [? Sumbul], which is employed there as a remedy for cholera.

THE HYDERABAD CHLOROFORM COMMISSION still bears fruit. The anti-vivisectionists have petitioned the Viceroy of India in favour of the Indian Bill now under consideration for the regulation of vivisection experiments, suggesting that the higher animals should be wholly exempted from experimentation; that the animals should be kept under an anæsthetic throughout the investigation; that the use of curare should be entirely prohibited; and that one inspector should be appointed on account of his recognised humanity, not his scientific knowledge.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

Scheduling Carbolic-acid.

SIR,—We cannot allow your "Editorial Remarks" of December 16 to pass without notice, though we do not wish to emulate your example in "writing a book."

The whole object of our letter was to show what you fail to disprove, viz.:—"That the mere fact of scheduling does not lessen either accidental or suicidal poisonings."

Further, we may point out that your statistics do not agree with those given in the Registrar-General's Reports.

Yours truly,

F. C. CALVERT & Co.

[The statistics were taken from the Reports referred to.—
ED. C. & D.]

The Value of Carbolic Acid.

SIR,—We are surprised that you should have inserted Mr. Kingzett's letter, which is nothing less than a personal and insulting attack upon ourselves.

He knows full well that what we have said is borne out by the fact that carbolic acid is not only recognised as a "standard disinfectant" by various European Governments, but it is also the one he and other makers of rival products select as a standard to attack, as they are always attempting comparisons and making assertions which cannot be proved.

For Mr. Kingzett's edification we append two statements, one from your own journal, and one from the *Medical Times and Gazette* :—

Chemist and Druggist, July 30, 1892, says :—"Although the superiority of carbolic as a disinfectant has been frequently challenged, there is no doubt that it continues to hold the first place in public favour."

Editor Medical Times and Gazette, October, 1878, says :—"Carbolic acid has probably saved, and is saving every day, more human lives than any other drug, except, perhaps, quinine or opium."

We are not going to enter into any controversy with Mr. Kingzett; but there is one deduction we can draw—viz., that he has not much faith in his "pet disinfectant," or he would not advertise a "bactericide" the active ingredient of which is bichloride of mercury, and an aerial disinfectant the virtue of which is sulphurous anhydride.

Bradford, Manchester,
December 19.

Yours truly,

F. C. CALVERT & Co.

Stores Prices.

SIR,—Perhaps you can kindly explain in your next issue how it is that the Civil Service Stores can sell Dunbar's "Alkaram" at 1s. 8d., as per your "English News," page 814, December 9 issue, when I have to pay my patent-house 26s. 1d. net for the same article. Has the maker one price for chemists and another for Stores?

December 8.

Yours,

INQUIRER.

Sherlock Holmes and Iodoform.

SIR,—You are rather behind regarding iodoform-odour suggestion to "Sherlock Holmes," as Conan Doyle some time ago makes S. H. diagnose "Dr. Watson" as having resumed practice from iodoform-odour entering room with him.

Yours truly,

DIODENES. (191/63.)

Company Pharmacy.

SIR,—Having carefully read the numerous letters on this subject, I think I perceive a vein of selfishness running through the whole. First we have Mr. Boot defending company pharmacy, and, from his standpoint, we think he correctly states a case; on the other hand, a number of chemists rush forward to attack Mr. Boot and his theory, and their replies show pretty well how the land lies, and notify at once where the shoe pinches.

But who is to blame? Years ago, when company pharmacy was unheard of, chemists troubled themselves very little about public welfare, nor exercised any great care that the best of goods were always supplied at a reasonable rate; it was only when cash receipts were dwindling away that they began to trot out modern war cries. Surely they don't expect to put the world back twenty years. It is too late to cry for Parliamentary protection. The mistakes of the past can only serve as guideposts to future actions, but such actions cannot overturn company pharmacy. Company pharmacy is here, one of the signs of the times, and here it will remain. Reasonable ideas, which injure none engaged in legitimate trade, will always find sufficient support to attain an object; but when individuals waste time and talents in raving against a recognised state of affairs that has been evolved out of the apathy of the past, all I can say is that it is a bad look-out for their cause.

Yours,

AN OLDHAM LIMITED. (185/60.)

SIR,—In dealing with the principles of company pharmacy all seem to ignore or overlook the fact that it is a high state of economy, the smart business man and the chemist combined; the one is essential to the other. The two combined are well-balanced, and the public are benefited by a better service, better quality, and more reasonable prices.

Your correspondent "X," in your issue of the 9th, quotes some of the prices of Boots (Limited) at Hanley, and says, "Surely this is a process of extermination," and aptly remarks, "There are two sides to most questions." So there are, but he only gives the one. It would be interesting to know who commenced such "process." If my information is correct it was not Boots (Limited), but another chemist, who no doubt thought he could score with the public by issuing a handbill similar to theirs, and cutting one or two prices a trifle below the firm in question. The result was they reduced to a figure below that at which most chemists can buy, but which still leaves them a profit. This is a suicidal policy for a chemist to adopt against a company. He has his one shop and cannot afford to sell at a loss; they their many, and what matters it if one is a loss for a time?—the others support it.

Surely 'twere better to play second fiddle and get some profit than first and get none. Follow rather than lead in cutting, and probably this method was adopted by your correspondent "Anti-Humbbug," and found to be the most favourable.

Yours, &c.

MOLECULE. (186/36.)

SIR,—If "Company Pharmacy" were prevented would store prices cease? Assuredly not. "Cutting" was commenced by chemists themselves, and will always be carried on. It simply means the "survival of the fittest." One can hardly suppose that anyone believes that "cutters" make their profits by the sale of patent medicines only. Men who devote themselves to business will generally succeed, and leave it to others to write the miserable epistles and make the absurd suggestions we read and hear.

There is another point that has not yet been raised. I should like to know what would become of a great many assistants were it not for such companies as Boots Limited. Everyone is aware that a great many chemists carry on business almost entirely, and in many cases solely, by the aid of apprentices who, when their term is completed, are turned adrift to look out for themselves. I know of a man who generally has four apprentices in various stages of probation.

Is this done in the interests of would-be chemists or for the sake of cheap labour?

I am not ashamed to admit that I am one of Boots (Limited) managers, and I cannot help feeling amused at

some of the suggestions made for the extermination of myself and colleagues.

Having had experience of both classes of business (high class and stores), I should like to say that for every reason I infinitely prefer the latter: I get shorter hours, larger salary, and am always treated as a gentleman.

Yours truly,

C. E. REYNOLDS.

89A Moor Street, Burton-on-Trent,
December 16.

SIR,—Last month in a paper by me read before the London Chemists' Assistants' Association I drew attention to this subject, and quoted numerous instances of companies floated this year with no qualified men apparently among their shareholders, evidently in most instances in order to evade the Pharmacy Act. One young man of twenty-two had been fined by the Pharmaceutical Society, and admitted that he had converted his business into a limited company in order to evade future penalties.

Anna Ruppert was recently fined for selling a preparation containing corrosive sublimate without being qualified. Now by virtue of the Companies Act she may sell this and any other poison she may choose, so long as she employs a qualified person to hand over the poison to the purchaser. Lastly, we have another unqualified person selling a scheduled poison (veratria) in the form of a proprietary article, apparently with the consent of a court.

These loop-holes in the Act certainly require mending. Clearly we cannot expect to stop company pharmacy so long as we permit executors of a deceased chemist to continue his business. Until we rescind the widow's clause we are powerless to prevent further extension of the evil. How can we check unqualified companies whilst we allow unqualified executors to control pharmacies? Let us first amend our pharmacy law, and then enforce it.

I would suggest that the proposed federation should take this matter up. In order that it may be thoroughly representative, all chemists, assistants and apprentices should be asked to join. I think we have a very strong case for future legislation. It is monstrous that a Pharmacy Act should be in force that prevents an individual from practising pharmacy, whilst any unqualified trader may by the simple expedient of taking unto himself six other individuals form a limited company, and completely upset the intentions of the Act. The public safety is by no means sufficiently protected by employing a qualified assistant.

Yours faithfully,

December 14.

C. E. PICKERING.

SIR,—Notwithstanding retail price-lists and Bills announcing "store prices," &c., the full price of patent medicines is readily paid, showing the folly of so much reduction. Proprietors should make the wholesale prices to chemists and others of 1s. 1½d. articles 12s. 6d. a dozen, and supply coupons to the wholesale houses, with instructions to supply same with each order executed, of course specifying the quantity, and the chemists monthly send same to the respective makers to be allowed a commission equal to the gain by the higher charge to the wholesale.

As chemists have not other departments to depend on for profit I should suggest that companies be exempt.

Yours respectfully,

T. B. L. (187/13.)

SIR,—Having very carefully thought out the question I have come to the conclusion that the only way to save the individual chemist is to advocate the policy, one qualification one shop, and pass it. When chemists can get a living profit they will be able to employ more assistants, pay better wages, give better food, and allow more time out.

Young men in the employment of limited companies, how are you going to live when you are old? Do the limited companies pension off their smart assistants when they get a little stale, or do they employ them as porters? Remember, all cannot be managers in these large firms which sell at wholesale prices with which individual chemists cannot compete, and as the limited companies extend their branches the individual chemist must go under. So, before

it is too late, I entreat all qualified men to advocate one qualification one shop, for that alone can save the individual chemist from total obliteration.

AMBLESIDE. (191/24.)

SIR,—Each correspondent challenges and vanquishes his imaginary foe in his special way, either by straight cut or back-stroke; each has a scheme to propound, each has a method of putting an end to company-pharmacy; yet few have struck what appears to be the fundamental note upon which is built the discord. Each one lapses into that everlasting sing-song—the cutting of prices. What has the cutting of prices to do with company-pharmacy? The minimum of profit is the result, and not the cause of it. Moreover, when shall we hear the last of the cant about "public safety," when selfish interest is the underlying meaning?

However much some chemists may sneer and pretend to be amused at Mr. Boot's letter, he has drawn an undeniably successful and striking parallel—a not altogether undeserved retaliation. The letters of many others adduce ideas all of which seem irrelevant, and interfere more or less with what has been our national boast—Free Trade.

The solution of the whole problem lies with the qualified assistants, and the sooner chemists persuade themselves to believe it, the better will be the result.

Why should an assistant refuse to take service with a company? Their hours are short, remuneration good, and time for recreation, whilst the chemist thinks his assistant almost unworthy of consideration—an automaton guaranteed to maintain continuous pressure throughout the day.

It is unnecessary to ask why the companies treat their assistants well. It is evident why they do so. They know that in them lies their strength. Who can be surprised at "Pharmacist's" defiant proclamation? Had chemists decided to act towards their assistants as the companies do, company-pharmacy would long ago have died of inanition.

The qualified assistants hold the key of the position, and it rests with them whether company-pharmacy shall advance or retire, and not with the Pharmaceutical Society, nor any Bill to be brought into the House of Commons. I am not in a company's service, and have never been, nor do I advocate such. Yet I am of opinion that the majority of assistants are conservative, and I believe that if chemists were prepared to treat their assistants as do the companies and not exercise that petty tyranny and serfdom to which they have so long been accustomed, the assistants would more readily support them, and company-pharmacy would have a more formidable opponent, a union—not a miserable union, by subscription, of eternal malcontents, like the trades-unions, but a union of mutual interests and progress, which, like the nominal etiquette of the medical profession, would be an almost invincible and insurmountable barrier to any outsiders.

Respectfully yours,

AN ASSISTANT. (185/37.)

DISPENSING NOTES.

Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the under-mentioned topics.

Alum-and-Myrrh Lotion.

176/18. Dispenser wishes to know how best to dispense the following, so as to avoid precipitation of the resin:—

Alumins	5j.
Tinct. myrrhæ	5j.
Aq. dest. ad	3viij.

M.

[Dissolve the alum in the greater part of the water, then rub up about 60 grs. of powdered acacia with the tincture; pour this quickly into the alum-solution with a brisk shake. In place of the acacia 2 drs. of tincture of quillaia, or the same quantity either of tincture or concentrated infusion of senega, may be added to the myrrh in the same way

"Dispenser" will find "The Art of Dispensing" invaluable for reference in dispensing-difficulties similar to this.]

A Menthol Lotion.

170/48. *Aq. Solæ* has not been able to make a good preparation from the following prescription:—

Menthol, 10 per cent.	3iv.
Glycerini	3iv.
Aqua ad	3iv.

Ft. lotio.

[A 10-per-cent. solution is apparently meant, and, considering the purpose, a solution in rectified spirit would be most suitable. Dissolve the menthol in spirit, rub up with glycerine, add about 3 drs. of tincture of quillaia, and then the water, gradually, so as to form an emulsion. A much nicer-looking preparation may be obtained by rubbing up the menthol solution and glycerine with 2 drs. magn. carb. lev., adding the water, and filtering; but in this way much of the menthol is lost. Perhaps, on consultation with the prescriber, a 10-per-cent. solution in anhydrous ether, made up to the quantity prescribed with olive oil in place of the glycerine and water, would exactly answer the purpose, and would form a very elegant liniment.]

LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMISTS' AND DRUGGISTS' DIARY.

185 30. *Whitworth Red Bottle*.—We regret to find that the statement above the label for this preparation in the DIARY, page 383, is exactly the opposite of what it should be. We have referred back to our issue of July 17, 1886, when the label was first printed, and find that we there stated that "the label would necessitate a patent-medicine stamp." By some strange freak of mental perversion this has been misread in copying. Subscribers will please make a correction in their DIARIES.

168/4. *Dentist*.—Under the Gasworks Clauses Act (1847) Amendment, 1871, the only conditions as to the purity of the gas supplied are the following:—"The quality of the gas supplied . . . shall with respect to its illuminating-power, be such as to produce at the testing-place provided in conformity with this Act a light equal in intensity to that produced by the prescribed number of sperm candles of six to the pound, and such gas shall, as to its purity, not exhibit any trace of sulphuretted hydrogen." This Act applies to all gas companies, each of which has a further special Act which regulates the quality of the gas more strictly. A copy of this Act is to be seen at the gasworks in any district by any consumer. In London the methods of testing the gas are under the control of the gas referees appointed under various Acts of Parliament, the present ones being Professor Harcourt, Dr. Pole, and Professor Rücker. The conditions laid down are:—

1. The gas when burning at the rate of 5 cubic feet per hour shall give a light equal to that produced by sixteen standard sperm candles (six to the pound, burning 120 grains per hour).
2. There shall be no sulphuretted hydrogen in the gas.
3. The ammonia in the gas shall not exceed 4 grains per 100 cubic feet.
4. The sulphur in the gas existing in the form of compounds other than H_2S shall not exceed 17 grains and 22 grains in the winter per 100 cubic feet.
5. The pressure of the gas shall not be less than that produced by a column of water of one inch between sunset and midnight, and six-tenths of an inch between midnight and sunset.

Without going into details, the methods adopted in testing the gas consist in first accurately adjusting the meter until a flow of 5 feet per hour is obtained; the illuminating-power is then taken by means of a photometer of suitable form. Another meter measures the gas used for testing for impurities. Twenty cubic feet are passed very slowly through an apparatus containing slips of paper soaked in acetate of lead, upon which the gas continually impinges. It then

passes through a known quantity of standard acid solution, which collects the whole of the NH_3 , and is finally burnt in a special apparatus in the neighbourhood of a large excess of ammonium carbonate. The sulphur is considered to be oxidised to SO_3 , which is retained by the ammonia and estimated by precipitation as $BaSO_4$. Excess of impurity or deficiency in illuminating-power renders the supplier liable to a fine. All cases in London are decided by Dr. Williamson, the chief gas-examiner, and after his decision the companies may appeal to a magistrate, who has then the power to mitigate the fine, but not to reverse the chief gas-examiner's decision.

184/73. *Lex Agris*.—A is an apothecary (L.S.A.) keeping an "open shop"; B is his assistant, holding the Assistants certificate (L.S.A.). Can B sell and dispense poisons? A the apothecary, says he can under the 16th section of the Pharmacy Act. [You must wait till the Glasgow appeal-case is heard. At present the presumption is that the assistant may not sell a poison. We do not see that the Apothecaries' Assistants' qualification makes any difference.] A man gives away 1 drachm of tincture of opium, labels same "Poison—laudanum." Can he be prosecuted by the Pharmaceutical Society? [Not if it is a bona-fide giving; but an attempt to evade the Act by a pretended giving would not be likely to succeed.]

184/19. *Tenant*.—The case seems to come rather under the covenant for payment of rates, taxes, assessments, and outgoings. The practice is for the Sanitary Authority to serve the owner with notice and leave him to deal with the tenant. The following case, decided by the Court of Appeal, seems to go to the point asked, but the matter is not free from difficulty, and the case in question was under the Public Health Act, not the Metropolitan Act:—"Expense of repairing defective drainage. Public Health Act, 1875 (38 and 39 Vict., c. 55), secs. 94, 95, 96, 98, and 104. The defendant was tenant to the plaintiffs of certain hereditaments under a lease, by which he was bound to 'bear, pay, and discharge . . . all other taxes, rates, duties, and assessments whatsoever, whether Parliamentary, parochial, or otherwise.' The drainage having become defective, the sanitary authority of the borough within which the hereditaments were situate caused a notice to be served upon the plaintiffs requiring them, as owners, to abate the nuisance, and the notice not having been complied with obtained an order from a Justice to the like effect. The plaintiffs, having executed the works necessary to enable them to obey the order, sought to recover the cost of them from the defendant under the foregoing covenant. Held by Lords Justices Baggall and Bramwell (Lord Justice Brett dissenting) that the action was maintainable."—Budd v. Marshall, 5 C.P.D., 481.

173/6. *W. B.*—The law stands at present that no unregistered person can sell a proprietary medicine containing an appreciable quantity of a scheduled poison, unless such preparation has been patented. In the Kay's essence case in Ireland, the prosecution failed on the ground that the preparation had been patented.

185/67. *Lex* says a farm-servant had two fingers injured by a mowing-machine. The bailiff of the farm sent the man to him ("Lex"). "Lex" dressed the fingers and supplied lotions, &c., subsequently sending an account to the master. The master refuses to pay, and says the servant has left his employ. Can the master be compelled to pay? [It is no part of a master's duty to provide his servant, other than an apprentice, with medicine or medical attendance, but of course a master may render himself liable to pay for medicine supplied by his conduct. Our correspondent, however, would be bound to prove that the bailiff had his master's authority to send, and did actually send, the servant to our correspondent; but the Judge might possibly infer such an authority for the bailiff.]

174/8. *Hants*.—Write to the company.

187/21. *H.* has received notice to pay inhabited-house duty on stables and warehouse at some distance from shop and on another person's premises. Is this a legal charge? [It would be as well to give notice of appeal against the assessment to inhabited-house duty of a stable and warehouse forming part of another letting, and not occupied with the house and shop. The Act says that where the house or shop and the outbuildings and premises occupied therewith amount to over 20% there shall be charged certain duties, but we think this means outbuildings and offices included in the same curtilage or, at all events, in the same letting. We should advise our correspondent to write direct to Somerset House, addressing his letter to "The Secretary, Inland Revenue, Somerset House, London, W.C.," as well as giving notice of appeal.]

186/7. *Nemo* asks: "Is it legal to sell proprietary articles such as cough-mixtures, chlorodyne, toothache elixir, over the counter in 2d. or 3d. lots, the customers bringing their own bottles, &c., although the label put on is in the possessive case?" [The medicine-stamp duty is charged upon every bottle "containing" any dutiable medicine, and the duty is to be paid before the bottle with its contents is first sold or delivered out of the custody or possession of the maker or compounder. If a customer brings his own bottle to be filled we do not think you would incur a penalty for selling an unstamped medicine by merely putting a dutiable label on the customer's bottle, because the penalty is imposed upon the person who shall sell any bottle containing a dutiable medicine. But it is a risky thing to do.]

186/40. *Research* asks: "Can the Revenue impose a penalty for recommending a pure drug such as cod-liver oil or eucalyptus oil if you have not done so by means of handbill, poster, label, or circular, &c.?" [A medicinal drug, such as cod-liver oil or eucalyptus oil, is exempt from medicine-stamp duty "uttered or vended entire without any mixture or composition with any other drug or ingredient whatsoever" by any chemist or any other person licensed to sell stamped medicines. If your case is within these lines no penalty can be inflicted upon you.]

190/42. *A.S.*—If you send any articles to Germany by parcel post you must fill up a declaration of the contents, and duty, if any, will be charged on delivery. The articles you name would be liable to a duty, we think, as proprietary medicines.

MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulæ, educational or other specific information can be obtained from the Publisher.

We are obliged to a number of subscribers for copies of their calendars, almanacks, &c., which they have sent us. We hope to refer to them shortly.

175/24. *Josephine*.—There is no book that we know of published on Wood-stains, but there should be no difficulty in making similar preparations to those which you mention after a little experiment. Spirit-soluble aniline dyes of all shades are now obtainable, and they would go well with a cheap varnish.

176/15. *Infusion*.—For brief directions as to the preparation of concentrated infusions see *C. & D.*, December 3, 1892, page 820.

184/46. *Jon*.—We do not know what signification the letters A.R.P.S. may have. If they are intended for "Associate of the Royal Pharmaceutical Society," they are used under a misapprehension.

174/32. *Xenophon*.—Tonic Pills for pigeons:—

Ferri sulph. gran.	5j.
Pulv. capsici	3j.
Ext. nucis vom.	2r. vj.
Pulv. gentiane	5ss.
Glyc. tragacanth.	q.s.

Mix, and divide into sixty pills. Coat with sugar. Allow each pigeon six of these pills per day.

183/65. *J. K.*—Lupuline Compound for Hop Bitters:—

Hops	3iv.
Dandelion-root	3ij.
Sassafras	3ii.
Liquorice-root	3ij.
Gentian	3ii.
Orange-peel	3ij.

All in coarse powder, and mix.

184/70. *F. F.*—In making Elixir Phosphori by Williams's process, the glycerine is heated and the phosphorus dissolved in it by shaking. To this solution the alcohol is added warm. If you try the process you will see how beautifully it works, provided the phosphorus is not in excess.

157/23. *H.* (Calcutta).—Mercury is by far the most efficient drug for removing deep-seated deprsities, such as hydrocele. The most active and cleanly preparation is oleatum hydrargyri (5 or 10 per cent.) to which 10 per cent. of ether has been added. Of this 20 drops are to be gently rubbed in twice daily. It should be added that no external application can be expected to produce any effect upon a hydrocele unless it is used for a considerable time, and that even then a cure is very uncertain. Puncture of the sac, or a combination of that with injections of iodine, or carbolic-acid solution, are the only methods by which a speedy and certain result can be attained.

183/22. *Patent Plate*.—You had better apply to dealers in earthenware. Our opinion on subjects quite outside this business cannot be of any special value.

178/1. *H. O. D.*—Mr. P. W. Squire pointed out in his lecture at Bloomsbury Square last winter that methylene-blue, like other aniline colours, is variable, and it often happens that a portion of the colours is insoluble. See his "Methods and Formulæ" (Churchill).

179/24. *M. H. S.* (Bombay).—(1) Danish Butter-colouring is a solution of oil-soluble aniline orange in any sweet oil, such as pure sesame. Two drachms of the colour to the pint of oil suffices. (2) Finger-nail Varnish.—After the nails have been polished with putty-powder, they may be painted with the following varnish:—

Hard paraffin	5j.
Otto of rose	mij.
Chloroform	3ij.

Dissolve.

Finally polish with chamois. (3) Boroglyceride.—This preparation is patented, but the new United States has a similar article, called "Glycerite of Boroglycerin," of which the formula is—

	Grammes
Boric acid, in fine powder	310
Glycerine, a sufficient quantity to make	1,000

Heat 460 grammes of glycerine in a tared porcelain capsule to 150° C (302° F.), and add the acid in portions, constantly stirring until dissolved and until the weight is reduced to 500 grammes. Then add 500 grammes of glycerine, and mix.

(4) Liquid Annatto may be made from seeds or paste. The former is preferable. Take 1 lb. of the seeds, and, without bruising, macerate for a day in a pint of water containing 2 drachms of carbonate of potash. Repeat the maceration twice with as much water and a drachm of

carbonate on each occasion. Boil the seeds in the last pint for an hour, mix all the liquors, evaporate to 10 oz., add 2 oz. of rectified spirit as a preservative, and filter.

174/45. *W. M.*—Essence of Smoke, or Cambrian Essence.—Spirit of tar is commonly used for this purpose. It is sometimes combined with pyroligneous spirit and acid, as in the following:—

Crude pyroligneous acid	..	..	..	..	℥j.
Wood naphtha	..	..	..	..	℥iv.
Spirit of tar	..	..	..	..	℥ij.
Mix.					

181/36. *J. D.*—Kid-reviver.—See last volume, February 4, page 192, and May 13, page 667.

182/11. *Headache.*—See the article on Neuralgia in our issue of September 9, page 390. Phenacetin as there prescribed is invaluable.

182/677. *Jaspers.*—Cough-mixture for Children (non-poisonous):—

Ammon carb.	..	..	..	..	℥ss.
Vin. ipecacuanhae	..	..	..	..	℥ss.
Aq. anisi	..	..	..	..	℥ij.s.
Liq. cocci	..	..	..	..	℥j.
Syr. toluani ad	..	..	..	..	℥vj.
Mix.					

Dose: For children between one and three, half a teaspoonful; for those above, a whole teaspoonful three or four times a day.

183/67. *Bromide.*—It is only prolonged use of cantharides in large doses that produces irritation of the neck of the bladder. Whenever signs of this appear the medicine should be dropped. The pill should be given along with the tonic medicine. Dr. Hargreaves gives the following prescription for Spermatorrhœa which you might try as an alternative. He says he "has found nothing to answer better":—

Potass. bromid.	..	..	..	..	℥ss.
Tr. gelsemii	..	..	..	..	℥ij.
Ext. ergotæ liq.	..	..	..	..	℥ij.
Tr. belladonnæ	..	..	..	..	℥iss.
Syr. zingiberis	..	..	..	..	℥ss.
Aq. ad	..	..	..	..	℥viij.
Mix.					

℥j. twice daily, and a dose on retiring.

183/62. *H. T. W.*—"Tooth Extraction," by John Gorham, published by H. K. Lewis, 1s. 6d.

50/10. *Urinometer.*—Siebold's Method of Using Fehling's Solution for testing the presence of sugar in urine, is to boil 2 drachms of the Fehling and while boiling add to it 5 to 10 drops of the urine. If there is much sugar present the reduction is immediate; but if, in the course of a few seconds there is no evidence of reduction, $\frac{1}{2}$ drachm more of urine is added, and the mixture again brought to the boil. If that fails to give a precipitate of copper, which quickly turns red, it is safe to conclude that no sugar is present.

185/49. *H. Lane.*—There is a formula for non-excisable Ginger-wine Essence in the new DIARY, page 364.

167/40. *J. H. D.*—Chilblain-liniment.—The following is the approximate composition of the sample which you send us:—

Ol. eajuputi	..	..	..	..	℥j.
Lin. camph. co.	..	..	..	..	℥ij.
„ saponis	..	..	..	..	℥ij.
Glycerin	..	..	..	..	℥iss.
Aq. ad	..	..	..	..	℥iv.

Mix the first three ingredients, and add to the glycerine and water.

169/1. *Shah Heen.*—As we informed your agent, we did not receive any instructions along with the samples, and the latter did not include Erasmus Wilson's lotion. The only improvement we can advise you to make on the vegetable lotion is to omit the lemongrass perfume, which spoils an otherwise good wash. Instead of it use a sufficiency of—

Oil of bergamot	..	..	..	..	℥ij.
„ rose-geranium	..	..	..	..	℥j.
„ neroli	..	..	..	..	℥ix.

The carbolic tooth-wash does not foam, and requires the addition of much more quillaia. You, doubtless, have put some in, but these washes, unfortunately, lose their saponifying power. It would be better to decrease the carbolic acid by half, and add some oil of wintergreen to mask the taste of the acid, which is somewhat pronounced. The violet-powder requires no improvement.

181/9. *As.*—See the DIARY for glycerine-jelly formula.

172/55. *Chloral* sends us a few drachms of a Lotion. "used very successfully for wounds in the leg. It has been distributed by a philanthropic gentleman in London, but the supplies are now cut off." We make it out to be somewhat as follows:—

Chloride of zinc	..	..	..	..	gr. ij.
Glycerine	..	..	..	..	℥ij.
Lavender-water	..	..	..	..	℥ij.
Rectified spirit	..	..	..	..	℥ij.
Water to	..	..	..	..	℥iv.

Dissolve and filter.

176/5. *Penang.*—(1) We regret that we cannot assist you in arriving at the composition of the Indian Curry-powder. Only a prolonged chemical and microscopic analysis would enable us to say definitely what the constituents are. Perhaps you have not tried the following formula, which is as close to your sample as we can judge:—

Madras turmeric	..	..	..	..	℥iv.
Cumin-fruit	..	..	..	..	℥ij.
Cardamom-seeds	..	..	..	..	℥iss.
Fenugreek-seeds	..	..	..	..	℥vj.
Cloves	..	..	..	..	℥j.
Mace	..	..	..	..	℥ij.
Cayenne	..	..	..	..	℥iss.

Mix the whole, and reduce to powder.

(2) For Unbroken Chilblains, a stimulant is more satisfactory than a saturated solution of ammonium chloride. Tincture of iodine, or preferably a mixture of the liniment 1 part, and spirit of camphor 2 parts. Gentle friction is beneficial, and for that purpose the following liniment has given great satisfaction:—

Lin. aconiti	..	..	..	..	℥j.
Lin. camph. co.	..	..	..	..	℥iss.
Ol. eajuputi	..	..	..	..	℥j.
Lin. saponis ad	..	..	..	..	℥viij.

M.

To be rubbed into the parts affected at bedtime.

To allay the pain quickly, cocaine cerate, 15 grains to the ounce, is effectual.

184/65. *Ignorant.*—You make more out of the Preventive Drink than we have been able to do. We find neither gentian nor nitre in it. The following makes a dose for a cow:—

Epsom salts	..	..	..	..	℥ij.
Powdered liquorice	..	..	..	..	℥ss.
Powdered ginger	..	..	..	..	℥j.
Armenian bole	..	..	..	..	℥ij.
Oatmeal	..	..	..	..	℥iss.

Mix.

184/68. *J. L.*—The sample of Boiler-incrustation Powder which you send is powdered soda ash, with some peculiar perfume—or, rather, it has the odour of soap or

washing-powder, but contains no soap. See also the note on the top of page 852, December 16.

180/45. *J. W.* sends a sample of Silver Paste used by policemen for polishing their buttons, &c. The articles to be silvered are first cleaned with spirit of salt, and the paste is then rubbed over them. It is an ingenious composition or amalgam, consisting of tin and mercury, and may be made by rubbing together 1 part of tin-dust and 4 parts of mercury, or sufficient mercury to make a soft mass.

180/73. *C. W. D.*—The Gesso Powder which you send is common whitening. See notes on this subject in the DIARY. A white earth is imported from Spain as "Gesso" for clarifying liquids, but it contains barium carbonate or sulphate, which your sample does not.

179/66. *Salacetol*.—(1) The sample of Parisian Ointment for the Skin of hands and face appears to us to be like amandine, which may be made as follows:—

Powdered gum arabic 5ij.
Clarified honey 5vi.

Beat together in a warm mortar until perfectly uniform; then add—
Soft soap, B.P. 5iij.

When the mixture is uniform, add gradually and with undiminished beating—

Almond oil 3xxij.
Essential oil of almonds 5ss.

Keep the mortar warm meanwhile. Thin, if necessary, with proof spirit.

(2) The Dry-shampooing Liquid may be made according to the following recipe:—

Carbonate of potash 5ss.
Glycerine 3iss.
Lavender-water 3ss.
Bay rum 3ss.
Conc. infusion of senega 5ss.
Proof spirit 5iv.
Water to 3viij.

Mix.

Perhaps you may be able to imitate the perfume more closely than the above, which, however, is nice.

183/23. *Hair- tonic*.—(1) The sample of Hair-lotion which you send, and which you say your mother has found to make her hair grow 4 inches longer, and prevent it coming out, appears to have the following composition:—

Pilocarpine hydrochlorate gr. ij.
Dilute hydrochloric acid 5i.
Glycerine 5vj.
Rose-water (from otto) to 5viij.

Mix.

As the hair is always growing, we fail to see why the 4-inch growth should be specially attributed to this. (2) Do not use the formula at all. (3) Tincture of Burdock:—

Burdock (root) 5j.
Rectified spirit 3iss.
Water 3liiss.

Macerate the ground drug in the spirituous menstruum for a week, and filter.

The dose of this for an adult is a teaspoonful. It is, or was, used for coughs, colds, &c., but is not a powerful remedy. You may give it to children, but vin. ipecac. is much better. You seem to be educating yourself by believing everything that people tell you. You will have a lot to unlearn at that rate. (4) *Liq. Pruni Virg.* (1-7), by the boiling-process, means that you digest 1 lb. of the drug three or four times in 2 pints of water each time. Collect the decoctions, evaporate to 12 oz., add 4 oz. of rectified spirit, and filter. One ounce of this to 7 oz. of simple syrup makes syr. pruni virg. The liquor made by percolation is much better. (5 and 6) We cannot give you precise information on these points.

186/40. *Research*.—The only sure way of preventing the decomposition of the iodoform (which is inevitable) is to omit

it. You can surely find an equally active antiseptic (iodoform is but poor at the best, being chiefly a destroyer of germ-products) which would suit the purpose—resorcin, for example. Even the essential oils are better, antiseptically, than the iodoform.

185/59. *Policeman*.—Colza Oil is rather a poor burning-oil, because it is readily oxidised, thus becoming thick, so that capillarity is interfered with. Mix the oil with 10 per cent. of crystal paraffin oil.

186/28. *Nemo*.—Use green ginger instead of dried in the same way as directed in the DIARY, page 364.

INFORMATION SUPPLIED.

For this section we are always glad to receive from subscribers brief notes on practical subjects, recipes which have been found good in practice or which have required modification, and hints or fresh ideas on any pharmaceutical or trade matter.

Steel-and-Pennyroyal Pills.—

Ferri sulph. exsic. gr. j.
Aloes Bbd. gr. j.
Myrrh. gr. j.
Ol. pulgell q.s.
Ft. pil. j.

LIBRA. (174/43.)

Limes and Glycerine.—

Ol. amygd. exot. Oj.
Aque calcis Oj.
Ol. limonis q.s.

LIBRA. (174/43.)

188/48. "Blocker's Powder" is powdered resin and albumen. Proportions vary. For coarser work some use the resin alone. In any case, the resin must be exceedingly fine powder. For high-class work, such as illuminating on leather, fresh egg-albumen whipped and filtered.

"Blocker's dust" is p. cret. gall.; used as a protection for portions of work not operated on. D. D. FERGUSON.
Leytonstone, December 15.

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, post-card replies to the following:—

A Sealing-wax Lamp Wanted.—*Lux* (180/19) is a chemist in a small town where gas is either too dear or not available, and he has not a counter gas-jet for sealing-wax. He would like to adopt a lamp which would answer the purpose, and at the same time be inexpensive in the consumption of fuel. Can anyone who has experience in the matter advise him?

Drink "Covering."—It is very desirable in the interests of science that there should be placed on record the various materials used for disguising the odour of alcoholic drinks in the breath of a person who has recently partaken of them. I have known tea-leaves to be used, and when chewed they are fairly successful. I have seen in my juvenile days pills and a root used, the nature of both being unknown to me. The question has become of importance in connection with a case of a person who was suspected to be shamming drunkenness. No odour of alcohol was detected in the breath by a medical man. Being himself a medical man, he may have known suitable drugs to use. The experience of your readers would be a valuable contribution to knowledge.

INQUIRER. (187/73).

187/41. Is there a machine for filling collapsible tubes? If so, who sells?

187/57. What is Cherbert's Oil (used by veterinary surgeons)?

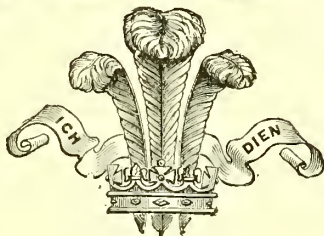
189/11. Formula for Dr. James's tic and headache powders.

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Pears' Soap

Soap Makers

by Appointment to



H.R.H.

The Prince of Wales.

RETAIL PRICES.

6d.

SIZE, unscented

Per Dozen.

4s.

1s.

,, all shapes, Washing or Shaving

8s.

1s.6d.

,, Ditto ditto

12s.

2s.6d.

,, (The Washing Tablets are perfumed with Otto of Roses)

20s.

WHOLESALE PRICES.

TRANSPARENT
GLYCERINE

2s. per Box of 3 Tablets

16s.

Per dozen
Boxes.

DISCOUNT of 20 per Cent.
On all ORDERS of NOT LESS than **£5.**

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If accompanied by Remittance,

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(Signed), *A & F Pears, Ltd.*

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OILS BAY, CARAWAY, CLOVES, CUBEBS, PEPPERMINT, SANDAL,
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BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	1.90
Sulphate of Soda	trace
Chloride of Sodium035
Moisture82
Insoluble	nil

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We are not concerned to defend the town of Horncastle—save to say that it is a well-built place, full of business and enterprise, and the centre of one of the richest agricultural districts in England; but we would like to point out that whilst carriage is an item to be overcome owing to geographical position, yet every other expense—rents, rates, labour, horse keep—are enormously below what we should have to pay in large centres, especially in London, and therefore when we quote a low price it is because our expenses are proportionately less than many larger houses who list their goods at higher prices. As regards carriage—having close through rates to nearly every town in England, Scotland, and Wales—we are able to deliver free at less cost than might be expected. The rapid increase in our business has shown us that our policy of selling goods right off at the lowest remunerative profit, instead of trying to get as high a price as possible from some customers and meeting the price with others, has proved a success, even from our point of view.

We keep quality our first consideration, and all our goods may be relied on as being the very best except when otherwise stated.

Our thanks are hereby tendered to our many friends for their cordial support, and we respectfully ask them to continue their orders and inquiries, which shall at all times meet with prompt and careful attention.

W. KEMP & SON.

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Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot, Otto de Rose, and all



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Carmine, Aniline Dyes; Bees'
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(DUNCAN'S),

Prepared from Pure and Methylated Spirit, also Chloroform (blue label).

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in bottles corked and luted (stoppers attached), and in hermetically sealed flasks when required.

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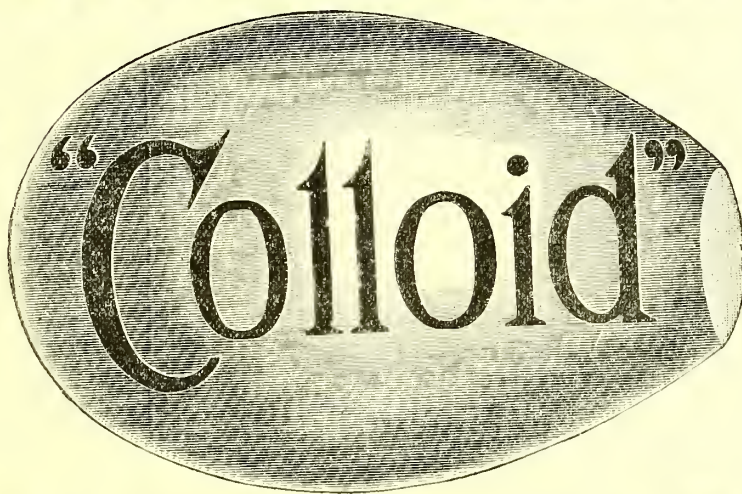
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Once introduced, will always be asked for.

SOLD in bulk, or in elegantly got up boxes for Retail Sale,
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kind, with Retailer's Name and Address.

Specimen Prices.

			Per 1,000.	Per Doz. Boxes.
Castor Oil (15 min.)	12/-	8/-, 36 in each.
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Sandal Wood Oil (English), 10 min.	38/-	...	13/-	24 "
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We shall be pleased to forward descriptive pamphlets, samples, and full particulars of the following remedies recently introduced by Dr. Von Heyden's Successors, for whom we are sole agents for the United Kingdom.

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Creasote Carbonate (Heyden).

Consists of creasote in combination with carbonic acid, is non-toxic, non-caustic, odourless, and almost tasteless; in the intestine it is decomposed into creasote and carbonic acid, and, in fact, possesses the excellent remedial action of creasote without its poisonous and unpleasant effects. Is highly beneficial in tuberculosis, &c.

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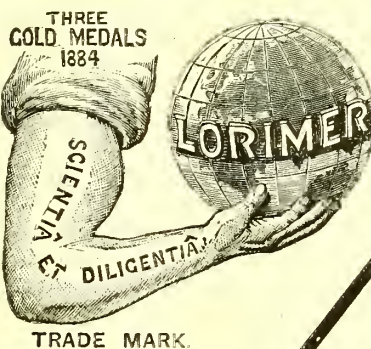
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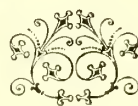
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FOREIGN MEDICINES AND PATENTS, 76 NEW BOND STREET, LONDON.

Messrs. Roberts & Co. beg to inform the Trade that they are Agents for all the principal French and Foreign Specialities and Medicines, a large supply of which they have always on hand, and can supply on very favourable terms. They are in daily communication with their Paris House, and can offer exceptional facilities for procuring New Medicines, &c., &c., with very little delay. The following is a list of a few that they name *au hazard*, and that have a large sale:—

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4/6..Alcool de Menthe Riebles	41/6	4/6..Capsules Matico.....	35/	2/3..Guyot's Liq. Gondron	18/	2/9..Rabuteau's Dragées Ferrug.	24/6
2/9.. Ditto ditto	21/	4/6.. " Mathey Caylus.....	35/	9/..Laville's Gout Tincture.....	81/	7/.. " Elixir Ferrug.....	65/
2/9..Aubergier's Syrup.....	27/	4/6..Chassaing's Wine.....	39/	9/.. " Pills.....	78/	2/9.. " Syrup Ferrug.....	24/6
1/9.. " Pâte.....	15/	2/9.. " Pills.....	24/	1/11 Papier Fayard.....	69	4/.. " Racahout des Arabes.....	31/
6/6..Bay Rum.....	57/	4/6..Clin's Dragées Bromide Cam.	43/	2/3.. Ditto.....	13/6	4/6..Reynal's Bougies.....	38/
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2/6.. Ditto.....	18/	2/9..Flon's Syrup.....	23/	2/9.. " de Coca Mariani.....	25/	1/9..Vallet's Pills.....	14/6
4/6..Brou's Injection.....	27/	2/9.. " Soda.....	15/4	1/9.. " de George.....	14/6	2/9.. Ditto.....	23/
4/6..Bugeaud's Wine.....	36/	2/3..Granules Arsen. Acid.....	13/6	1/11 " Ditto.....	9/	4/6..Veloutine (White, Pnk, Oim.)	28/
3/6..Bully's Vinegar.....	30/	2/9.. " Iron.....	14/5	1/6.. " de Nafé.....	13/6	3/6.. Ditto ditto.....	22/
2/.. Ditto.....	14/6	2/9.. " Soda.....	15/4	1/9..Regnaud.....	14/6	2/9..Vichot's Trochisques.....	22/
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4/6..Capsules Bromide Camph....	45/						

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[1823

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LISTERINE.

NON-TOXIC NON-IRRITANT, NON-ESCHAROTIC—ABSOLUTELY SAFE, AGREEABLE, AND CONVENIENT.

FORMULA.—LISTERINE is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

DOSE.—Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially useful in the management of catarrhal conditions of the mucous membrane, adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, injection, irrigation, atomization, inhalation, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

LISTERINE destroys promptly all odours emanating from diseased gums and teeth. It is a perfect tooth and mouth wash, indispensable for the Dental Toilet.

DISEASES OF THE URIC ACID DIATHESIS. **Lambert's Lithiated Hydrangea.**

RENAL ALTERNATIVE—ANTI-LITHIC.

FORMULA.—Each fluid drachm of "LITHIATED HYDRANGEA" represents thirty grains of FRESH HYDRANGEA, and three grains of CHEMICALLY PURE Benzo-Salicylate of Lithia. Prepared by our improved process of osmosis. It is INVARIABLY of DEFINITE and UNIFORM therapeutic strength, and hence can be depended upon in clinical practice.

DOSE.—One or two teaspoonfuls four times a day (preferably between meals).

Close Clinical observation has caused LAMBERT'S LITHIATED HYDRANGEA to be regarded by physicians generally as a very valuable Kidney Alternative and Anti-lithic agent in the treatment of

Urinary Calculus, Gout, Rheumatism, Cystitis, Diabetes, Hæmaturia, Bright's Disease, Albuminuria, and Vesical Irritations generally.

REALIZING that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value is of the highest importance that suitable diet be employed. We have had prepared for the convenience of physicians

DIETETIC NOTES.

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, supplied, upon request, together with literature fully descriptive of LISTERINE and LAMBERT'S LITHIATED HYDRANGEA.

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Compressed Pellets.



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NOTICE.

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MANUFACTURED FROM INDIAN OPIUM!

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Morphia and Codeia.

MORPHINÆ HYDROCHLORAS, PUR. B.P.

in Lots of 10 oz. 4/9 per oz.
Ditto ditto in Lots of 100 oz. 4/6 "

CODEINA CRYSTAL, PUR. B.P.

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East India Agents for the Wholesale Drug and Aërated Water Trade,

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LARGEST DEALER IN

MEDICINAL HERBS OF ALL KINDS.

You buy from FIRST HAND and in GENUINE quality.

ICELAND MOSS, ERGOT OF RYE, ARNICA FLOWERS,
LUPULIN, CHAMOMILES, UVÆ URSI (SUMACH),
PEPPERMINT, ACONITE, COLCHICUM TORMENTILLA,
CALAMUS, HEPATICA, SABINE, &c., &c., &c.

ASK FOR PRICES AND SAMPLES.

Address for Telegrams, "BOLLAND LONDON."

HODGKINSONS, TREACHER & CLARKE,

ESTABLISHED UPWARDS OF A CENTURY.

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101 WHITECROSS STREET LONDON E.C.

ESSENTIAL OILS. PEARL COATED PILLS. CHEMICALS. TINCTURES IN BOND

Manufacturers of Pharmaceutical Preparations

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Fustic Extract, Aniline Dyes, Fine Lakes for Lithographic Inks, Vermilionettes, Drysalteries.

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WHOLESALE DRUGGISTS,

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SOLE MAKERS OF
GABRIEL & TROKE'S
GELATINE CAPSULED
HORSE BALLS.

Alternative, Condition, Cordial, Cough,
Diuretic, Fever, Physic, Worm, Quinine
Tonic Balls (Registered 61,291).

GELATINE-COATED DOG AND FOWL PILLS. SAMPLES FREE.

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FOR CHILDREN TEETHING.

Greatly facilitates the process of Teething, by softening the Gums, reducing all Inflammation; will allay ALL PAIN and spasmodic action, and is

SURE TO REGULATE THE BOWELS.

Depend upon it, Mothers, it will give rest to yourselves and

RELIEF & HEALTH TO YOUR INFANTS.

Mrs. WINSLOW'S SOOTHING SYRUP

Has been used for over Fifty Years by millions of Mothers for their children while Teething with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhoea

BROWN'S BRONCHIAL TROCHES

CURE COUGH, COLD, HOARSENESS, AND INFLUENZA. CURE ANY IRRITATION OR SORENESS OF THE THROAT.
RELIEVE THE HACKING COUGH IN CONSUMPTION. RELIEVE BRONCHITIS, ASTHMA, AND CATARRH.
CLEAR AND GIVE STRENGTH TO THE VOICE OF SINGERS, AND ARE INDISPENSABLE TO PUBLIC SPEAKERS.
SOOTHING AND SIMPLE, CHILDREN CAN USE THEM, AS THEY ASSIST EXPECTORATION AND RELIEVE
HOARSENESS.

NOTICE. — Brown's Bronchial Troches are guaranteed to contain no Opium or other Poison.

London Office — 33 FARRINGDON ROAD.

THE MEXICAN HAIR RENEWER

Prevents the Hair from Falling Off. Restores Grey or White Hair to its ORIGINAL COLOUR.
Being delicately perfumed, it leaves no unpleasant odour.
IS NOT a Dye, and therefore does not stain the skin, or even white linen.
Should be in every house where a **HAIR RENEWER** is needed.

APPLY FOR WHOLESALE TERMS TO

THE ANGLO-AMERICAN DRUG COMPANY, LIM.
33 FARRINGDON ROAD, LONDON, E.C.

ADVANCE in PRICE.

The One Shilling Size of
YOUNG'S COUGH MIXTURE,
"SALLY-COME-UP,"

Will be advanced 6d. per dozen from
January 1, 1894. Chemists stocking this popular
remedy should write for novel advertising matter.
1s. and 2s. 6d. bottles.

WHOLESALE AGENTS—

Goodall Backhouse; Hirst, Brooke & Hirst, Leeds;
Radnes; Bleasdale, York; Foggitt, Thirsk; Loft-
house & Saltmer, Hull; Daniels, Derby; Evans,
Liverpool; Edwards & Son; Newberys, London;
Watts, Sheffield; Boot's Drug Co., Nottingham,
Sheffield, and all branches; Taylor's Drug Co.,
Leeds and all branches.

SOLE
PROPRIETOR — **J. YOUNG, CHEMIST, TORQUAY.**

**HARROLINE PILLS.**

The Great Harrogate Tonic.

An unfailing Cure for Poverty
of Blood, Anæmia, Chlorosis,
and every form of Debility arising
therefrom.

1s. 1½d. and 2s. 9d.

WHOLESALE FROM THE

**HARROLINE PILL CO.,
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FULL PARTICULARS & TERMS ON APPLICATION



The above are now supplied ONLY from 59 Gray's Inn
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ESTABLISHED 1775.

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MANUFACTURING CHEMISTS.

Manufacturers of Acids, Æthers, Sp. Æther. Nit., Sp. Ammon. Arom., Liq. Ammon., Soldering Solution, &c.,
and repurations of Alum, Animal Charcoal, Antimony, Baryta, Bismuth, Strontia, Zinc, &c.

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Works:—WEST DRAYTON, MIDDLESEX.

Telegraphic Address:—"ETHERMETHYLATED LONDON."

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Beg to inform their friends and the Trade generally that, having purchased the
Business of

BARRON, SQUIRE & CO., BUSH LANE,

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves
to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

CHRISTMAS OFFER.

After stocktaking we are able to offer a limited number of (net) £4 cases of Assorted Soaps, such as Milled and Superfatted Carbolie, Salphur, Coal Tar, Oatmeal, Cream Soap, Pine Tar, &c., in three-dozen boxes. Also some soaps in boxes of three tablets, all at a considerable discount.

These Soaps are lines or shapes which we no longer make, or the boxes are slightly soiled. If the assorted case above-mentioned should, on inspection, be found not to suit, we agree to have it returned to us intact, carriage paid, if returned at once.

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SPECIALITIES: AMIDOL-HAUFF, METOL-HAUFF, and GLYCIN-HAUFF,
The Three Photographic Developers of the Day.

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We only supply goods direct from Manufacturers personally known to ourselves. We can consequently vouch for the purity of the articles we sell.

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MAGNESIA

CARBONATE, CALCINED, AND HYDRATE.

PURE FLUID MAGNESIA.

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PHARMACEUTICAL CHEMISTS, EXPORT DRUG MERCHANTS,

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OL. LAVAND. RECT.



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Largely replacing the Mitcham Oil, 21/ lb.

Hydrobromic Syrup of Hypophosphites.

LAC BISMUTHI.

Fine quality, keeps well. 6/6 lb.

Lac Bismuthi et Ceril, &c.

THOS. GUEST & CO.

City Works, Carruthers St., MANCHESTER.

MAKERS OF ALL DESCRIPTIONS OF MEDICATED LOZENGES.

B.P., T.H. Ph., and General Proprietary Lozenges. Finest Gum Jujubes and Pastilles—Glycerine and Black Currant, &c. Granular and all other Effervescing Preparations. Boiled Sugars, Floral Tablets (1892).

BEFORE BUYING ANY OF THE ABOVE, PLEASE SEND FOR SAMPLES AND COMPARE.
TELEPHONE NATIONAL 235. TELEGRAMS "GUESTO."

PASCALL'S GOLDEN MALTEX

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Contains 25% of Allen & Hanburys' Extract of Malt.

A NOVEL CONFECTION.

Delicious Flavour. Brilliant and Attractive Appearance.

SELLS AT SIGHT.

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1/- Bottles, 9/- per dozen; 1-lb. Bottles, 18/- per dozen;
and in 2-lb. and 4-lb. Bottles, 1/4 per lb.

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CALVERT'S INDIAN BATH SOAP

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Contains 15 per cent. of genuine Carbolic, which is the best remedy for Sores, Insect Bites, Stings, Ringworm, Prickly Heat, or other Skin Ailments and Parasitic Complaints.

Sold in Tablets, WITHOUT PRICE ON, at 2/- per dozen Box, less usual Trade Discount.

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HAVE BEEN AWARDED

60 GOLD AND SILVER MEDALS AND DIPLOMAS

For the Superior Excellence of their Preparations.

50

RANDALL'S BLACK CURRANT LOZENGES

Plain Black Currant, old square 2/6	Black Currant Voice (warm
Plain Black Currant, rough oval 2/6	astringent) 3/
Black Currant and Ipecacuanha 2/6	Black Currant Cough Lozenges* 3/6
Black Currant and Tannin .. 3/	*Ipecac. & Morph., strength as "B.P."

In Bottles, 1-lb., 2-lb., 4-lb., and 7-lb. For exportation, in soldered Tins, of any size. From W. EDWARDS & SON and J. SANGER & SONS, London; through any Wholesale House; and from the Manufacturers,

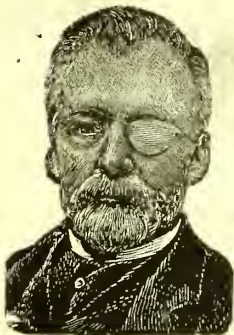
RANDALL & SON, SOUTHAMPTON,

Who will forward Samples by post on application.

Also Brown Cough Lozenges, 2/-; 7 lbs. stamped with name free.

N.B.—Medical Lozenges of every kind, including those of the Pharmacopoeia of the Hospital for Diseases of the Throat, London, made with Black or Red Currant.

Harrison's Featherweight Eye Preservers & Reading Shades



Court Journal says of them—"They are a perfect gem of beauty, lightness, and utility."
XYLONITE EYE CAPS
 (Concave). Rights and Lefts.
 Flesh Coloured.
 Stop out the Light and Cold without
 Touching the Eye

Of **MAW, SON & THOMPSON,**
 And all Sundriesmen,

And **T. H. HARRISON,** 40 Hatton Garden, London, E.C.

CORNS or BUNIONS.

A GOOD LINE FOR CHEMISTS.

IT WILL PAY TO STOCK AND PUSH OUR FAMILY BOOT STRETCHERS

They will win the gratitude of customers and profit for yourselves.
 Worked by powerful screw action. Three Brass Corn and Bunion Pieces,
 which can be adapted to Relieve Pressure of Boot on any part of the Foot.
WILL STRETCH OR BLOCK ANY SIZE.



RETAIL, PRICE

5/-

THE FAMILY BOOT STRETCHER. EACH.

TO BE HAD OF THE MAKERS—

E. & W. BELDEN, BOOT TREE & LAST MANUFACTURERS,
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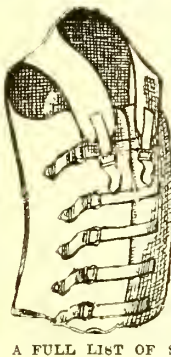
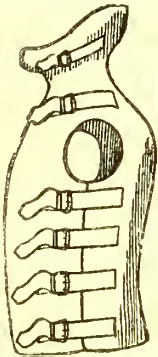
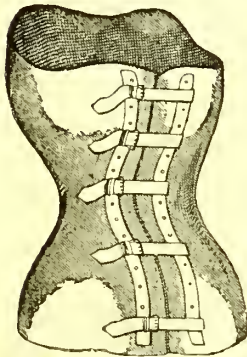
TERMS ON APPLICATION.

COCKING'S ADAPTABLE PORO-PLASTIC JACKETS AND SPLINTS.

Patentee and
 Sole Manufacturer, **J. T. COCKING, PLYMOUTH.**

Jacket.

Cervical Jacket, No. 1. Cervical Jacket No. 2.



JACKET

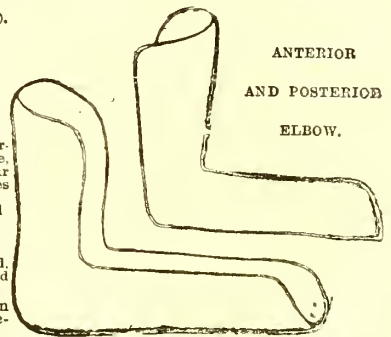
(In cases of slight deformity).

INSTRUCTIONS FOR MEASUREMENT.

Circumference at axilla.
 " waist.
 " hips.
 Length from axilla to great
 trochanter.

In severe angular cases, circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.
CERVICAL JACKETS.
 Same measurements required, and circumference at neck, and length from neck to axilla. Any part of the Jacket can in the process of manufacture be left soft.



ANTERIOR

AND POSTERIOR

ELBOW.

A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION.

CHEST PROTECTORS

Our Own Manufacture. Made in the following Materials:—

SCARLET FELT. PINE WOOL FELT.

SCARLET FLANNEL LINED CHAMOIS (The best Skins only used).

FUR WOOL FELT (Natural Colour).

AND

SCHUTZE'S HYGIENIC WASHABLE CHEST PROTECTORS

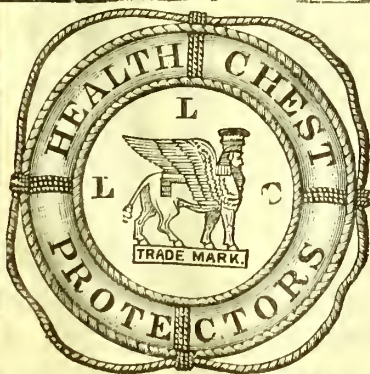
(Natural and Scarlet). Our Speciality.

IN SIZES FROM 1 TO 6.

INTENDING BUYERS WILL FIND IT TO THEIR ADVANTAGE TO WRITE FOR SAMPLES AND PRICES.

F. SCHUTZE & CO., 36a ALDERSGATE STREET, LONDON, E.C.

Manufacturers,
 Telegraphic Address:—"ODORATORS LONDON."



THE LIVERPOOL LINT CO.

MARK STREET MILLS, LIVERPOOL,

Inventors and Manufacturers of

THE ORIGINAL STOCKINETTE FLEECY

CHEST PROTECTOR

Every Protector has this Trade Mark on Label.

Large Discounts. Perfect Goods.

WHITE, SCARLET, AND NATURAL GREY.



THE INHALANT "SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

DISEASES OF THE LUNGS, WINDPIPE, NOSE & THROAT.

CLAIMS TO BE A

Specific for all Congestive and Inflammatory Conditions of the Respiratory Apparatus,
And will be found efficacious in

INFLUENZA, COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria,
Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice,
Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

Beware Genuine except such as bear the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the
Bottles, on the Label over the Cork, and on the Wrapper.

Retail Price, 4s. 6d. and 11s. per Bottle. Set of Apparatus for Administration, 15s.

PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

THE SPIRONE COMPANY, LIM., DEPOT- 285 REGENT STREET, LONDON, W.

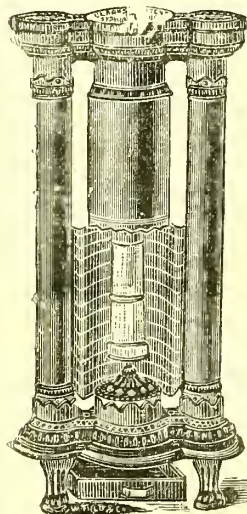
TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF

"THE SYPHON" (REGISTERED TITLE) **HYGIENIC CONDENSING GAS HEATING-STOVES**
(CLARK'S PATENT).

A Necessary for all Invalids. A Comfort to Everybody.

NO FLUE REQUIRED. FREE FROM SMELL OR SMOKE.



All injurious vapours are reduced to harmless liquid inside the
Stove, and passed out at foot into a tray provided for that
purpose.

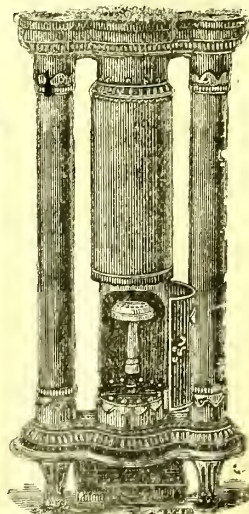
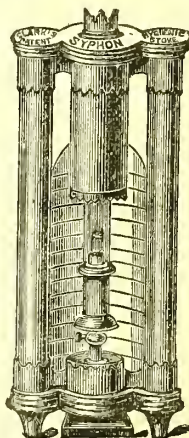
For use in Hospitals, Sick Chambers, Bedrooms,
Halls, Conservatories, Schools, Shops, &c.



They give a Pure, Equable, and
Agreeable Heat, which can be
graduated and sustained at the
will of the user.

Specially suitable for pa-
tients suffering from Bron-
chial affections, as a moist
atmosphere is obtainable
when required.

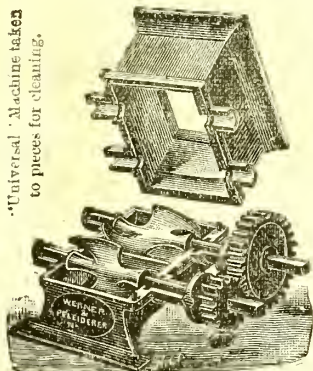
For Terms, Particulars, and Prices, apply
to



S. CLARK & CO., Patentees and Makers, Syphon Works, Park Street, ISLINGTON, LONDON, N.

Telegraphic Address—"SYPHON STOVES LONDON." Wholesale Agents—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.

"Universal" Machine taken to pieces for cleaning.



Size 3, Type 1., for 1-lb. Mass.

THE "UNIVERSAL" Kneading & Mixing Machine,

Used by all the largest Pill Makers.

SUITABLE ALSO FOR
OINTMENTS, POWDERS,
AND MASSES
of any
Consistency.

PILL MASSING MACHINES.

PILL
PIPERS,
CUTTERS,
ROUNDERS, COATERS,
"SPIRAL BRUSH"
POWDER-SIFTERS

(WITH INTERCHANGEABLE SIEVES),
AND EVERY ACCESSORY FOR THE PILL ROOM.

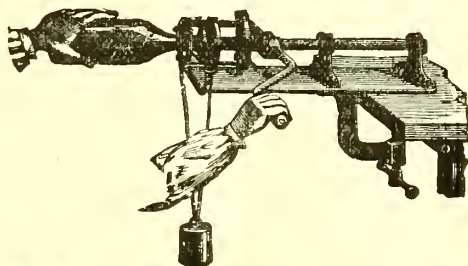
WERNER, PFLEIDERER & PERKINS (LIMITED),
43 Regent Square, GRAY'S INN ROAD, W.C.

SHOWROOMS:—117 QUEEN VICTORIA STREET, E.C.

Contractors to the War Offices of all the Great Powers & other Governments

NEW CAPSULING MACHINE

The only Machine
which leaves no crease
or pleat on the
Capsule.



Can be fixed to any
Counter.
A single pull of the lever
is sufficient
to fix the Capsule.

Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.

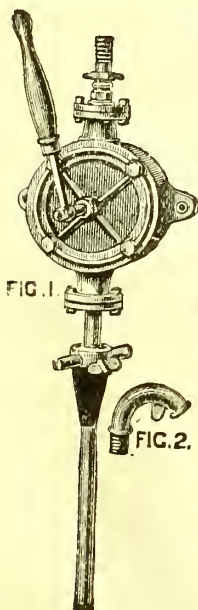


FIG. 1.

FIG. 2.

BUY THE BEST

OIL PUMP

AND SAVE

OIL, TIME, MONEY.

THOUSANDS IN USE.

We have bought the Stock of these Pumps from
MESSRS. PONTIFEX & WOOD,
SHOE LANE, LONDON,
Who have given up this part of their business,
and it is our intention to continue same.

We hold a Good Stock, and can give
Prompt Delivery.

Write for full particulars and prices of The "Farrington"
Patent Oil Pumps to

W. H. WILLCOX & CO.
34 & 36 Southwark Street,
LONDON, S.E.

GLASS BOTTLES

GOOD AND CHEAP.

From Stock
in London or
direct from
the works.

THE NEW SHAPE FLATS,

With rounded edges, or the ordinary kind, plain or graduated.

3 and 4 ounce 8/- per gross.
6 and 8 " 9/- "

WHITE MOULDED PHIALS.

1 oz. 1 oz. 1 1/2 oz. 2 oz.
3/6 - 3/9 .. 4/6 .. 5/3 per gross.

PANEL BOTTLES.

2 oz. 4 oz. 6 oz. 8 oz.
7/- .. 8/- .. 9/- .. 9/- per gross.

SPECIAL NOTICE.—Six gross and upwards of assorted sizes
sent Carriage Free to any part of England. Smaller quantities
not carriage paid. Sample Bottle sent free on application.

I. ISAACS & CO., GLASS BOTTLE MANUFACTURERS,

Francis St., Tottenham Court Road, LONDON, W.C.

Established 50 Years Bankers—London and Westminster Bank

STOKES' CASH TILL.

REDUCED PRICE

50/-

(Sent on Trial seven days, on receipt of two references).

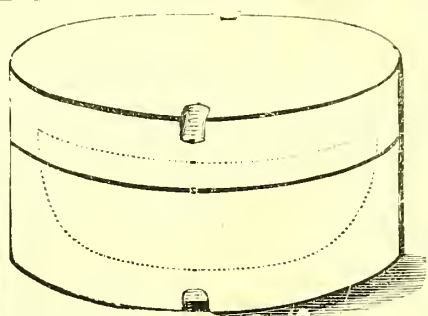
Particulars and Testimonials on application.

G. R. STOKES & CO., LIM.,
HANLEY, STAFFS.

WILLIAM TOOGOOD.

TOOGOOD'S IMPROVED PATENT EARTHENWARE COVERED POTS

Are claimed to be the most
perfect and convenient yet offered to
the Trade.



Owing to the increasing demand
for our Patent Pots, we have in-
troduced a Special THIN Series
for Dispensing.

These Pots are beautifully
glazed and finished, and, being
very light, are specially adapted
for sending by post.

ORINARY THICKNESS—									
1 dr.	2 dr.	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
1/6	1/6	1/6	1/8	1/10	2/-	2/3	2/10	3/6	4/6
THIN FOR DISPENSING—									
1/7	1/9	2/-	2/2	2/5	3/-	4/-	5/-	6/-	8 ounces.
8 ounces. 6/- per doz.									

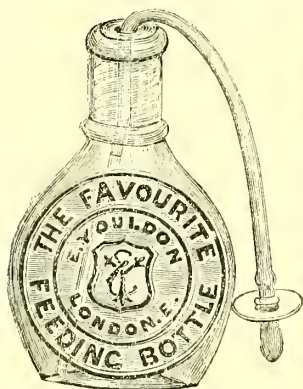
TOOGOOD'S BATHING CAPS. Write for New Season's List.

TOOGOOD'S SPONGE BAGS. Write for New Season's List.

TOOGOOD'S FLESH GLOVES. Write for New Season's List.

TOOGOOD'S FEEDING BOTTLES. Write for Special List.

BURLINGTON BUILDINGS, HEDDON ST., REGENT STREET, LONDON, W.



GLASS BOTTLES

OF EVERY DESCRIPTION.

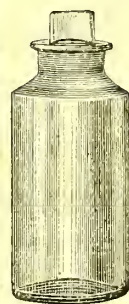
Revised Price List on Application.

FEEDING BOTTLES AT LOW RATES.

Write for Prices of any kind of Bottle required to

E. YOULDON,

East London Glass Bottle Warehouse,
36, 33, & 40 GREAT GARDEN STREET, WHITECHAPEL, LONDON, E.



Telephone No. 1365.

Telegraphic Address—"FISH LONDON."

New Full Series of Moulds for

ROUNDED-CORNER DISPENSING FLATS

in Perfect Shape has been Prepared by us
and THESE BOTTLES are

NOW IN STOCK

at our Last Reduced Prices.

[1]

JOHNSEN & JØRGENSEN.

KANGAROO EUCALYPTUS OIL

25-lb Tins.

KANGAROO



25-lb. Tins.

BRAND.

TRADE MARK.

Is admitted to be the Purest Eucalyptus Oil yet introduced to the public.
To be obtained of your Wholesale Druggist.

SOLE CONSIGNEES—LAUGHLAND, MACKAY & BAKER, 50 Lime St., LONDON.

COLONIAL ADDRESS—A. M. BICKFORD & SONS. WHOLESALE DRUGGISTS, 48 CURRIE STREET ADELAIDE.

WHOLESALE & EXPORT orders for

MASON'S

PERFUMED SOLUTION OF

CARBOLIC ACID

Should be addressed to

C. E. MASON & Co., 2 Beech St., LONDON, E.C.

TERMS UPON APPLICATION.

"IZAL" IS THE

NEW NON-POISONOUS DISINFECTANT

IZAL

And is now
supplied by the chief
Wholesale Houses.

Show Cards,
Pamphlets.

Printed Matter,
And any information
the Trade may require,
can be obtained on
application to

Allen & Hanburys,
BETHNAL GREEN,
LONDON.

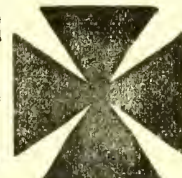
Who are the Sole Bottling
Agents for the Manufacture.



CAMPHORTAR

8/- per Gross

CAMPHORTAR



A combination of Camphor, Eucalyptus, and
Coal Tar. A Powerful Disinfectant, Deodorizer,
Insect Destroyer, and Air Purifier.

CAMPHORTAR

THE CHEAPEST DISINFECTANT BEFORE THE PUBLIC.

It is most elegantly and attractively packed in the form of
Maltese Crosses wrapped in Gelatine, and commands a ready
sale. Camphortar fills the sick room with a pleasant odour,
and destroys disease germs in the air. Camphortar is equally
destructive to Moths and other insects. Camphortar is used
as a protection against Smallpox, Influenza, Fever, Epidemics,
Cholera, and other infectious diseases.

To be obtained of the following Wholesale Houses:—

London: Maw, Son & Thompson, F. Newbery & Sons, J. Sanger & Sons,
May, Roberts & Co., Potter & Clarke, Hockin, Wilson & Co., W. Sutton &
Co., Bourne, Johnson & Lathner, Burgoyne, Burbidges & Co. Liverpool:
Ayrton & Saunders, Evans, Sons & Co. Manchester: Woolley, Sons & Co.,
Oldfield, Pattinson & Co., Heath Bros. Leeds: Simcock. Leicester:
Howard Lloyd & Co.

MANUFACTURED ONLY BY

W. G. HEDDEN, Albany Works, YORKSHIRE.

BLAUD'S PILLS (Best Quality, Soluble Coating).

10-gross Tins, carriage paid, for 4/6. Cash with order.
7-lb Tins (56 gross), carriage paid, for 21/- Cash with order.

COMP. SULPH. LOZ. (Garrod's Formula) & TABLETS.

4 lbs., carriage paid, for 4/- Cash with order.
7 lbs., carriage paid, for 6/6. Cash with order.

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

JAMES N. DAVIDSON & GRAY, CHEMISTS, DUNDEE.

COFFEE.**THE "ORIGINAL CANISTER" & ROASTED COFFEES**

These Coffees have been before the Public for nearly 50 years,
and are the very best of their kind.

WHITE, FAIRCHILD & CO., 30 Gt. Tower St., E.C.

ESTABLISHED 1847. AGENTS WANTED.

**BLAIR'S
GOUT & RHEUMATIC PILLS**

Cure Gout, Rheumatism, Sciatica, Lumbago, Neuralgia.

The Excruciating Pain is quickly relieved, and cured in a few days, by these celebrated Pills, well known as the Great Remedy for the above Complaints. **NO POISONOUS INGREDIENTS.**

CINCHONA BARK & CRUDE DRUGS.

SPECIALITIES OF

FREDK. GRAF,

DRUG MERCHANT,

65 FENCHURCH STREET, LONDON, E.C.

PRICES AND SAMPLES ON APPLICATION.

S.V.R.

In 40-gallon returnable iron casks, pure tinned, with screw bungs, interchangeable brass taps and spanners for opening. Farina, Dextrine, Glucose, Alcohol absolut., Fusel Oil, Pear Oil, Lime-Soda-Lead-Acetates, Verdigris, Acetic Acid, Wood Naphtha, Charcoal, Ammonia liquid 880-900, anhydrous Sodium Sulphide, Bromides, Iodides, Chloralhydrate, Boracic Acid, Sulphate of Copper, Permanganate of Potash, Ol. Caryophyll., Menth. Pip., Pini, Juniperi.

HUGO LORENZ, 7, 8 Idol Lane, LONDON, E.C.

See also page 114, March 18 issue.

EVERY CHEMIST

SHOULD STOCK

HEALD'S DOG MEDICINES.

They command a ready sale everywhere.

Address—HEALD, BURNHAM, BUCKS.

OXONIA

The New Lotion for Rodent Ulcer, Cancer of Tongue, Lips, Lupus, Ringworm, Varicose Veins, &c.

Retail, 2/6 per Bottle. Trade, 23/- per dozen, subject.

THOMAS CHRISTY & CO., 25 Lime Street, LONDON, E.C.

NESS & COMPANY, DARLINGTON,

SPECIALISTS IN

SHEEP DIPS (Fluid, Paste, Powder) and DISINFECTANTS.

Three Gold Medals & Highest Award World's Fair, Chicago.

WRITE FOR PARTICULARS AND SAMPLES.

PRECIPITATED CHALK, WHITEST PUREST.

CHEAPEST SELLERS IN THE MARKET.

ALSO CHEMICALS, DRUGS, AND OILS.

APPLY TO

AUG. LEVERMORE & CO., 8 LIME STREET, LONDON, E.C.

DENTISTRY.

First-class Mechanical work undertaken for the Profession at very low charges. Satisfaction guaranteed.

PRICE LISTS FREE.

A. J. BROWNING, 104 NEWLAND, LINCOLN.

DRUGGISTS' SUNDRY GOODS.**HEATH BROS.,**

27 BLACKFRIARS STREET, MANCHESTER,

Being cash buyers can offer all lines at the very lowest prices.

WRITE FOR QUOTATIONS.

GEORGE HAYNES & CO.

Hampstead Cotton Mills, Stockport,

MANUFACTURERS OF

BLEACHED & ABSORBENT COTTON WOOLS

GREY WOOL, COLOURED WOOLS, & JEWELLERS' SHEETS.

THREE GOLD MEDALS, TWO SILVER MEDALS, AND DIPLOMA OF HONOUR, The Highest Awards given to any Cotton Wool Manufacturers.

Telegraphic Address—"HAYNES STOCKPORT."

Bromley's Gout & Rheumatic Pills

Estab. 1807.

WILL CURE.

FREE Printing of Chemists' own Circulars.

HEAD DIARY, 1894, PAGE 265.

Voted 5th out of 500 representative firms' announcements in Diary, 1-93, as most useful and most likely to bring best results. Awaiting your esteemed reply to-day, with copy for Hand-bills or Labels.

CHEAPEST.

Retail Profit

£1 on £5.

Full retail prices absolutely guaranteed.

SIR THOMAS'S BUILDINGS, LIVERPOOL, ENGLAND.

PUSH

GETS THE BUSINESS!!

RICHARDS & BERT

ARE THE FIRM FOR

BOTANIC DRUGS, SEEDS, PERFUMERY, ESSENTIAL OILS, ETC., ETC.

SEND FOR PRICE LISTS.

16 Laurence Pountney Lane, Cannon Street, E.C.



E. H. THIELLAY'S (Registered 1867)

EUCALYPTIA.

From "Eucalyptus Globulus." An authentic regenerator of the hair, instantly stopping its falling off, and is invaluable for hairdressing; a safeguard in epidemic times, protecting surrounding the respiratory functions from malarious and vitiated emanations. In Bottles at 2/6, 3/6, 4/6, 7/-, 10/-, &c.

All Wholesale Houses, or direct from

E. H. THIELLAY

Parfumeur-Chimiste, Amersham Park, New Cross, LONDON.

SHOW ROOMS AT CHARING CROSS HOTEL.

[3]

WEST AUSTRALIAN DISTILLERY COMPANY'S**OLEUM SANTALI OPT.**

IS THE CHEAPEST PURE OIL ON THE MARKET.

Wholesale only.

SALE AGENTS:—SAML^r LAMBERT & CO.,

132 FENCHURCH STREET, LONDON.

A1 TINS 1d. SIZE } FOR OINTMENT,
also B1 2d. " } Tooth Powder, &c.

Plain or with Stock Embossing "Pet. Jelly," "Zinc Oint.," &c.

THE BEST AND CHEAPEST IN THE TRADE.

To be had of all Druggists' Sundriesmen.

A1—1½ × 1½

APPLY FOR SAMPLES.

B1—1½ × 1½

IT WILL COST NOTHING

Our Export List mailed free to
 Buyers abroad.

FLETCHER, FLETCHER & STEVENSON,
 21 MINCING LANE,
 LONDON, E.C.

A. & J. WARREN

23 & 24 Redcliff Street, BRISTOL,

WHOLESALE DRUGGISTS,

LICENSED MAKERS OF METHYLATED SPIRITS,

PROPRIETORS OF STODDART'S SEA SALTS.

Correspondents requested to specify precisely the quantity they can buy

HAND-PICKED GUM ARABIC.

Wholesale and Export Druggists before buying elsewhere
 should apply to

FREDK. FINK & CO.

10 & 11 MINCING LANE, LONDON, E.C. [2]

THE TARGET

TRADE MARK



THE TARGET TABLETS,
 Internal remedy for piles, &c., 2/8 box.

THE TARGET OINTMENT,
 External remedy for piles, &c., 1/14 box.

THE TARGET
 Little Vegetable PILLS

For indigestion, constipation, &c.,
 1/14 per phial.

PREPARATIONS are

Sole Proprietors—**WIDE SPOTTERS, CHEMISTS, SOUTHAMPTON.**
 Wholesale:—**EDWARDS, BARCLAY, &c., &c.**

TO LET.

Press Opinions.

"MANUFACTURING CHEMIST."



MESSRS. WATSON & WATES, of 93 Leadenhall Street, are exhibiting some novel and high-class accessories to a Chemist's display of their medicines and preparations, which are so well known throughout the United Kingdom, colonies, and mission stations abroad. The firm very wisely cultivate every facility for agents, and by this policy attract the attention of the most valuable factor in modern business—the *Distributor*. Old-fashioned houses are apt to rely upon their reputation, modern men are evidently alive to present exigencies, as on this occasion, the agent has no lack of materials in an attractive and portable form for presenting Homœopathic Medicines, for Messrs. WATSON & WATES are showing a new series of Counter Show Cases, including their *Registered Duplex* or *Pay-desk Case*, filled with all necessary Homœopathic Medicines for general domestic use. This handsome Cabinet is *absolutely presented free of charge* to the purchaser of medicines amounting at wholesale prices to £6 6s. The same liberality is observed in dealing with the *Acme Agent's Case*, which is included gratis with an opening order for £3 3s. The stand deserves careful inspection.

SPONGE IMPORTERS.

M. PETERSON & CO

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN & COLONIAL MARKETS

For CLEANING PLATE!

BRADLEY & BOURDAS'S

ALBATUM or WHITE ROUGE,

For CLEANING GOLD, SILVER, and PLATED GOODS.

A trial is only needed to prove its superiority over other Plate Powders in use. Chemists will find it to their advantage to recommend this Powder, as when it is once tried it is always continued to be used.

Sold in Boxes at 1s. and 2s.; Tins, 6s.

6 PONT ST., BELGRAVE SQ., & 48 BELGRAVE RD., LONDON, S.W.

Trade Notice.]



[Trade Notice.

ATKINSON & BARKER'S
ROYAL INFANTS' PRESERVATIVE.

Established by 100 years' experience as a safe and effective Medicine.

WHOLESALE AND EXPORT ORDERS SUPPLIED FROM THE MANUFACTORY—

11 RUSSELL STREET, DOWNING STREET, MANCHESTER.

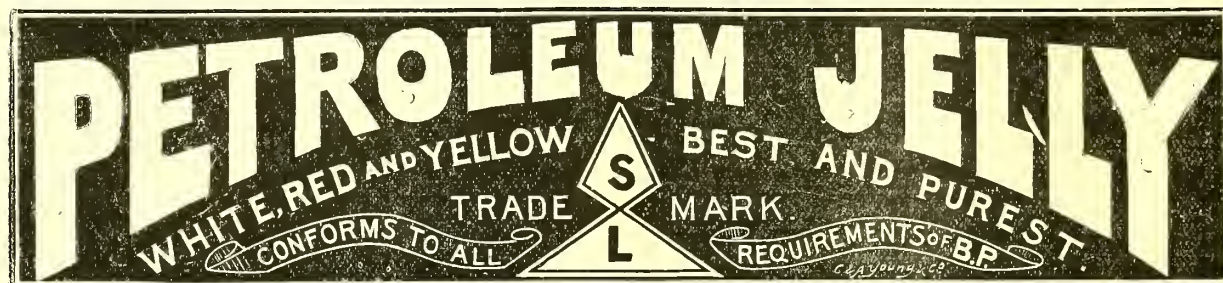
SHOW CARDS AND BILLS ON APPLICATION.

A GOOD LINE. HARTLEY'S CELLULOID GOLD PAINT

"An excellent gold paint."—*The Queen*. "A new joy to the home decorator."—*Myra's Journal*.
"Try Hartley's Gold Paint."—*The Lady*. "Have looked for this for untold time."—*Weldon's Ladies' Journal*

In Bottles, 6d., 1s., 2s. LIBERAL DISCOUNT TO THE TRADE.

THE ANGLO-AMERICAN VARNISH CO., ¹³ ST. PAUL'S SQUARE, BIRMINGHAM.



AND PRONOUNCED BY THE MEDICAL PROFESSION TO BE UNSURPASSED.

Extract from Analytical Report of Dr. S. Rideal, F.C.S., F.I.C., F.G.S.

"Practically tasteless and free from smell, contained no fat or resin, * * * carefully manufactured."

SNOWDON, SONS & CO., MILLWALL, LONDON, E.

WILEY'S CHEMICAL ESSENCE FOR LAMENESS in HORSES

*A Genuine Remedy. Brings credit to
all who sell it.*

50 YEARS' UNBROKEN SUCCESS

SOLE MAKER AND PROPRIETOR,

FRANCIS E. ROOKLEDGE, CHEMIST,
EASINGWOLD, YORK.

TO BE HAD OF USUAL WHOLESALE HOUSES.

58

MY PATENTED CHEMICAL PREPARATION "TERPENTINA"

(Registered 17,711)

Is acknowledged by the highest military authorities of England and Germany to be the only reliable medium for removing all spots of Oil, Grease, Tar, Varnish, Colour, Ink, Perspiration, Beer, Wine, and any other Stains.

ALL CHEMISTS AND DRUGGISTS SHOULD KEEP

"TERPENTINA" In stock, as no other preparation can show such marvellous success as "TERPENTINA"

Retail Prices, 3d., 6d., 1/- and 1/6 per Bottle.

To be had of all Wholesale Houses and Sundriesmen, or direct from the Sole Manufacturer and Proprietor,

HERMANN MULLERSON,
203 Shaftesbury Avenue, LONDON, W.C.
Agents required in all towns of Great Britain and Ireland.

SPECIAL LINE—FEEDING BOTTLES.

GREEN GLASS, Plain Neck, best Black Rubber Fittings 20/6 per gross.

WHITE GLASS, Screw Neck, best Black Rubber Fittings 27/11 "

VEGETABLE IVORY RING SOOTHERS. 8/6 "

Terms—Net Cash with order, packages free, delivered to rail or wharf, London.

SURREY PACKING CO., 57 New Kent Road, LONDON, S.E.

INDEX AND BUYERS' GUIDE

Pages 27 and 29.

SHOP FITTINGS.



FLEET STREET, LIVERPOOL.

THE above Photograph represents our Premises for the Manufacture of Shop Fittings, Show Cases, &c., &c. We shall also have pleasure in sending a selection of copies of many unsolicited letters received from various friends who have entrusted us with their orders.

Liverpool being one of the most important Timber Ports in the U.K., we are able to purchase suitable wood of the highest quality on most favourable terms, and being also a centre of the Cabinet Making Trade, can secure experienced workmen. We make all our work on the premises as above, send our own workmen to fix and complete, and shall be glad to send a competent Foreman to consult on the spot with our Friends, and then draw out complete plans, specifications, &c.

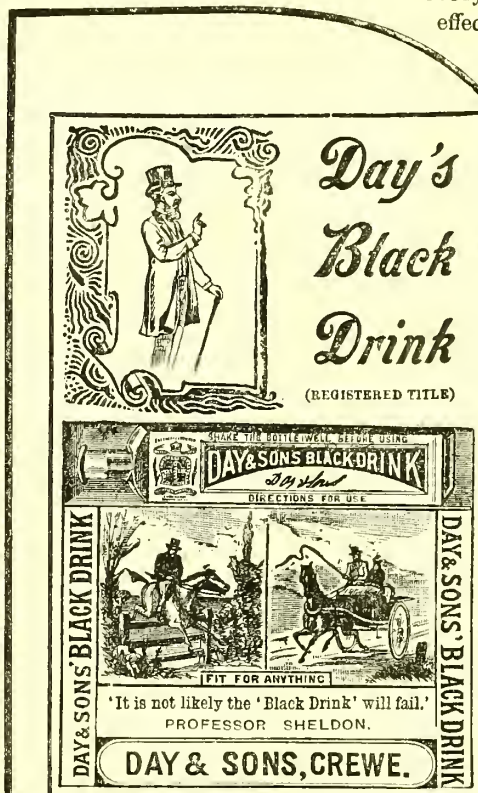
EVANS, SONS & CO., (Druggists' Sundries Department) 56 Hanover St., **LIVERPOOL.**

P.S.—We can also manufacture Cabinet work of any description.

London: EVANS, LESCHER & WEBB.

BLACK is not WHITE; but, for all that, it may be right, and entirely unconnected with the "Black Arts" in any of their "manifestations." We shall maintain that Black is a better symbol of life than White, as is evidenced by several colloquialisms, from which we may instance two—viz., "He swore like a black," "He fought like a black." Further, also, that the colour is an outcome of special activity—vide "He swore until he was black in the face."

that the hue is, when an of a stern struggle; nor "choked" is alive so long which can't be declared of "white." But all this is You may say DAY'S needs no introduction, but it DESERVES. The old wine needs no bush." but it always gets plenty. us that new wine should bottles; but rather more this is done to-day, when, tion of the old long, square an ancient name and look, at this closing period of the trying to palm off prepa- title "Black Drink" or which are in reality as BLACK DRINK as the sixpence was like the reign—seemingly perfect the scales. We give you detects this imposture: "BLACK DRINK" of Crewe; look for "Crewe" on the label, protect yourself from and "gilded sixpence"



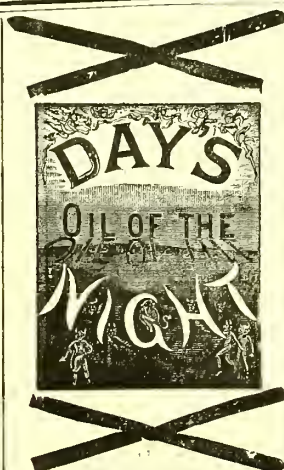
Nobody, moreover, can dispute effect of choking, the evidence will anybody deny that the as he remains "black," him when he turns an introduction merely.

BLACK DRINK

No; it doesn't NEED, proverb says, "Good Well, it may not Another reminds not be put in old than metaphorically with an apt imita- bottle, and bearing there are numbers, nineteenth century, rations under the Black "something," much like DAY'S Jubilee—gilded—genuine half sove- until you put it on the password which the genuine is prepared by Days "Day & Sons" and and you at once the "new wine" trick.

1/8 per bottle, or 19/- per dozen, is the price of

DAY'S BLACK DRINK.



What's good for BODILY PAIN?

DAY'S OIL OF THE NIGHT

The People's Embrocative Palm for Sprains, Muscular Weakness, Rheumatism, Lumbago, Cramp, Sore Throat from Cold, Sciatica, &c., and all Aches, Pains, and Soreness.

Send for "Day's Oil of the Night" terms framed to prevent CUTTING.

Chemists can have a Single Bottle direct. Price 1/1½ and 2/9 per Bottle.

DAY & SONS, CREWE, CHESHIRE.

DAY'S OIL of the NIGHT.

You can rely on it.

And you don't enjoy the
privilege of selling it
for nothing.

The Retailer has his
profit.

